

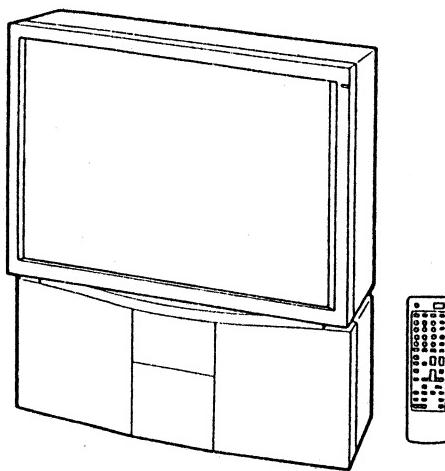
# KP-S4613

## RM-832

## SERVICE MANUAL

AEP Model

Chassis No. SCC-F39A-A



## AP-2 CHASSIS

### MODELS OF THE SAME SERIES

KP-S4613

### SPECIFICATIONS

Television system	B/G/H, D/K, L, I			
Colour system	PAL/SECAM and NTSC 3.58/NTSC 4.43 (VIDEO IN)			
Channel coverage	See page 2 "Receivable channels and channel displays" at the bottom.			
Projected picture size	116 cm (46 inches)			
Terminals				
Rear	- $\ominus$ 1 21-pin Euro connector (CENELEC standard) inputs for audio and video signals - inputs for RGB - outputs of TV video and audio signals $\ominus$ +2/- $\ominus$ 2 21-pin Euro connector - inputs for audio and video signals - inputs for S-video - outputs for audio and video signals (selectable) $\ominus$ +4/- $\ominus$ 4 21-pin Euro connector - inputs for audio and video signals - inputs for S-video - outputs for audio and video signals (monitor out)	Front	- $\ominus$ 2, - $\ominus$ 4 S-video inputs - 4 pin DIN - $\ominus$ Audio inputs (L, R) - phono jacks $\ominus$ + S-video output 4-pin DIN - $\ominus$ Audio outputs - phono jacks - $\ominus$ Audio outputs (variable)-phono jacks External speaker terminals: 2-pin DIN	
		Sound output	- $\ominus$ 3 video input - phono jack - $\ominus$ Audio inputs - phono jacks - $\ominus$ 3 S-video input - 4-pin DIN - Headphone jack: stereo minijack	
		Power consumption	2 x 30W	
		Dimensions (W x H x D)	1103.9 x 1289.1 x 511.8 mm	
		(incl. Speakers)		
		Mass (incl. speakers)	83 kg	
		Other features	Digital comb filter (High resolution) PIP (Picture-in-picture)	

Design and specifications are subject to change without notice.

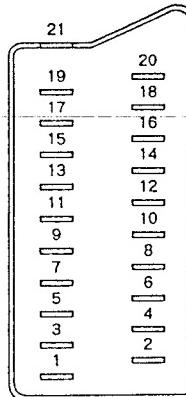
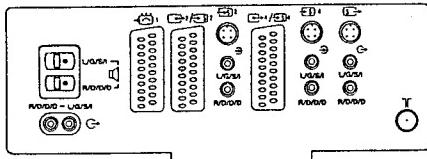
COLOR REAR VIDEO PROJECTOR  
**SONY**<sup>®</sup>



**Receivable Channels and Channel Displays**

Receivable channels	Indication on the screen
PAL/B/G/H	E2..12 21..69
CABLE TV (1)	S1..41
CABLE TV (2)	S01..S05 M1..M10 U1..U10
ITALIA	A B C D E F G H H1 H2 21..69
SECAM D/K	R01..R12 R21..R60
SECAM L	F2..F10 F21..F69
PAL I	B21..B68
	C01..C12 C21..C69
	C21..C68

21 pin connector (-5, -2, -4)



4 pin connector (-5)

Pin No.	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB, 75ohms, positive Sync: 0.3V ; 1dB
4	C (S signal) input	0.3V ± 3dB, 75ohms, positive

Pin No.	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB, 75ohms, positive Sync: 0.3V ; 1dB
4	C (S signal) input	0.3V ± 3dB, 75ohms, positive

○ connected   ● unconnected (open)

\* at 20Hz - 20kHz

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**SAFETY-RELATED COMPONENT WARNING!!**

COMPONENTS IDENTIFIED BY SHADING AND MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

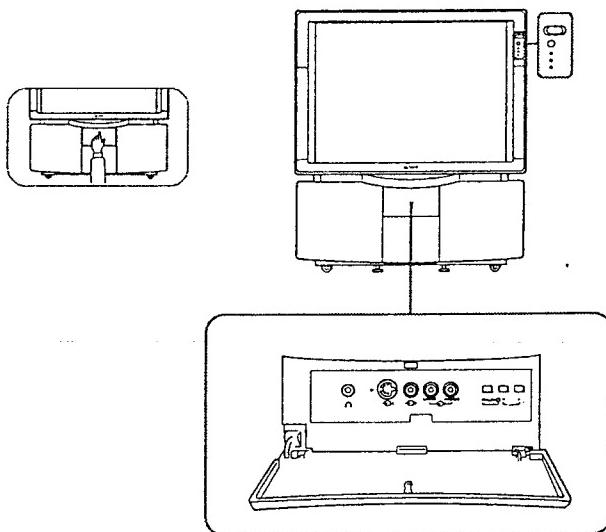
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

## SECTION 1 GENERAL

### 1-1. OVERVIEW

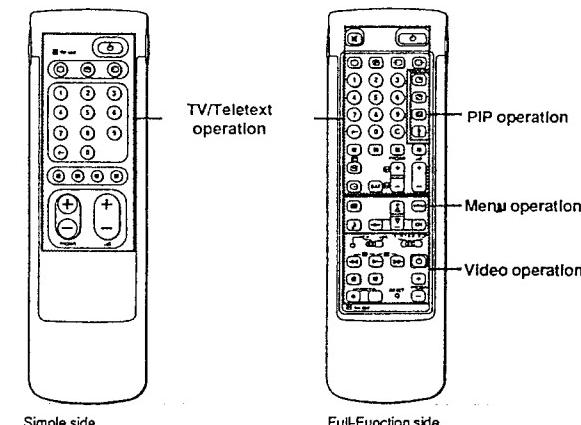
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

*TV set-front*



Symbol	Name	Refer to page
○	Main power switch	14
○	Standby indicator	14
A-C-B	Stereo A/B indicators	16
□	Headphones jack	22
-⊗ 3, -⊗ 3, -⊗ 3,	Input jacks (S video/video/audio)	22
P-⊗-⊗	Function selector (Programme/volume/input)	15
-/+	Adjustment buttons for function selector	15

*Remote commander*



**Note**  
The SAT button does not operate with this TV.

#### TV/Teletext operation

Symbol	Name	Refer to page
◀	Mute on/off button	15
○	Standby button	14
□	TV power on/TV mode selector button	14
⊗	Teletext button	15
⊗	Input mode selector	15
⊗	Output mode selector	23
1,2,3,4,5,6, 7,8,9, and 0	Number buttons	14
-/-	Double-digit entering button	14
C	Direct channel entering button	11
△/▽	Volume control button	14
PROGR+/-	Programme selectors	14
■■■■	Teletext page access buttons	19
■	Picture adjustment button	16
♪	Sound adjustment button	16
□	On-screen display button	15
⊕	Teletext hold button	19
⊖	Time display button	15
■■■■	Fastext buttons	19

#### PIP (Picture-in-picture) operation

Symbol	Name	Refer to page
□	PIP on/off button	18
†	PIP source selector	18
⊗	Swap button	18
⊗	PIP position changing button	18

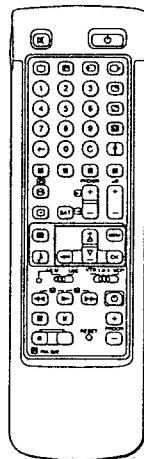
#### Menu operation

Symbol	Name	Refer to page
MENU	Menu on/off button	8
△/▽-	Select buttons	8
OK	OK(confirming)button	8
←	Back button	8

#### Video operation

Symbol	Name	Refer to page
MEM USE	MEM/USE selector	25
MEM	MEM indicator	25
VTR1/2/3, MDP	Video equipment selector	24
◀▶▶▶◀	Video equipment operation buttons	24
II ● ○ PROGR +/-	RESET button	25

## 1-2. ADJUSTING COLOUR REGISTRATION (CONVERGENCE)



Once you have set up the TV, you can choose the language of the menu. Then you should converge the three colour layers (red, green, and blue).

### Before you begin

- Check that the Full-Function side of the Remote Commander is visible.
- Locate Menu operation buttons on the Remote commander. They are shaded in the illustration at the left.

### 1 Display the Menu

- Depress  $\odot$  on the TV. The TV will switch on. If the standby indicator on the TV is lit, press  $\odot$  or a number button on the Remote Commander.
- Press MENU. The main menu appears. (See Fig. 1)

**MENU**



Fig. 1

### 2 Choose a language

- Select "Language" with the  $\Delta$  or  $\nabla$ -button and press the OK button. The LANGUAGE menu appears (See Fig. 2)
- Select the language you want with  $\Delta$  + or  $\nabla$  - and press OK.
- Press  $\leftarrow$  to return to the main menu.



Fig. 2

### 3 Converge the red, green, and blue lines

- Select "Convergence" with  $\Delta$  + or  $\nabla$  - and press OK. The convergence menu appears. (See Fig. 3)
- Select "the line" you want to adjust with  $\Delta$  + or  $\nabla$  -. Key to line adjustment symbols:  
I (red vertical - left/right adjustment)  
- (red horizontal - up/down adjustment)  
I (blue vertical - left/right adjustment)  
- (blue horizontal - up/down adjustment)
- Press OK. The line to adjust is selected.
- Press  $\Delta$  + or  $\nabla$  - to converge the selected line with the centre green line and press OK.

To move up (horizontal line)	Press $\Delta$ +
To move right (vertical line)	Press $\nabla$ -
To move down (horizontal line)	Press $\nabla$ +
To move left (vertical line)	Press $\Delta$ -

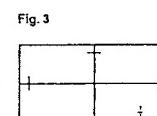
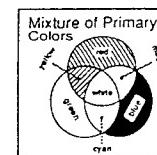
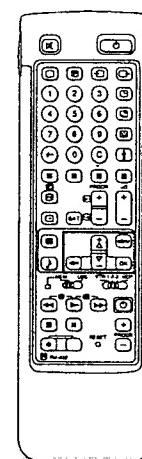


Fig. 3

- Repeat steps 2-4 to adjust the other lines, until all the lines have overlapped to form a white cross. (See Fig. 4.)
- Press MENU to return to TV picture.

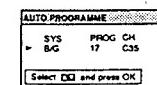


## 1-3. TUNING IN TO TV STATIONS

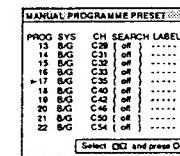


You can preset the channels (up to 100 channels) by choosing either the automatic or manual method.

The automatic method is easier if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one. The manual method is also convenient for allocating programme numbers to various video input sources.



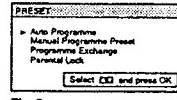
AUTO PROGRAMME  
SYS BG PROG CH 17 C35  
Select OK and press OK



MANUAL PROGRAMME PRESET  
PROG SYS CH SEARCH LABEL AFT  
12 B/G C31 1 S1 ..... (S1)  
13 B/G C32 2 S1 ..... (S1)  
14 B/G C33 3 S1 ..... (S1)  
15 B/G C34 4 S1 ..... (S1)  
16 B/G C35 5 S1 ..... (S1)  
17 B/G C36 6 S1 ..... (S1)  
18 B/G C37 7 S1 ..... (S1)  
19 B/G C38 8 S1 ..... (S1)  
20 B/G C39 9 S1 ..... (S1)  
21 B/G C40 10 S1 ..... (S1)  
22 B/G C41 11 S1 ..... (S1)  
Select OK and press OK

### Preset channels automatically

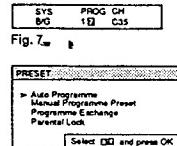
- Press MENU to display the main menu.
- Select "Preset" with  $\Delta$  + or  $\nabla$  - and press OK. The PRESET menu appears. (See Fig. 5.)
- Select "Auto Programme" with  $\Delta$  + or  $\nabla$  - and press OK. The AUTO PROGRAMME menu appears. (See Fig. 6.)
- Press OK. Select if necessary the TV broadcast system with  $\Delta$  + or  $\nabla$  - and press OK. (BG for western European countries, DK for eastern European countries) The first element of the "PROG" number will be displayed in red on a black background.
- Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with  $\Delta$  + or  $\nabla$  - or the number buttons (e.g. For "17", select "1") and press OK. The second element of "PROG" will be displayed in red on a black background.
- Select the second element of the double-digit number with  $\Delta$  + or  $\nabla$  - or the number buttons (e.g. For "17", select "7") and press OK. (See Fig. 7.)
- Using  $\Delta$  + or  $\nabla$  -, select C (to start presetting from the C channels) or S (to start presetting from the S channels) and press OK. The automatic channel presetting starts. When presetting is finished, the preset menu reappears. (See Fig. 8.) All available channels are now stored on successive number buttons.
- If you want to change to another broadcasting system, repeat 3-6.
- Press MENU to return to TV picture.



PRESET  
Auto Programme  
Manual Programme Preset  
Programme Exchange  
Parental Lock  
Select OK and press OK



AUTO PROGRAMME  
SYS BG PROG CH 17 C35  
Select OK and press OK



PRESET  
Auto Programme  
Manual Programme Preset  
Programme Exchange  
Parental Lock  
Select OK and press OK

Note on the DEMO function  
If you choose DEMO on the main menu, you can see a sequential demonstration of the menu functions.

Use this method if there are only a few channels in your area to preset or if you want to preset channel's one by one. You may also allocate programme numbers to various video input sources.

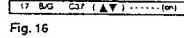
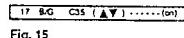
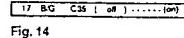
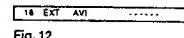
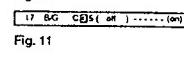
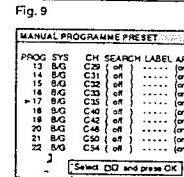
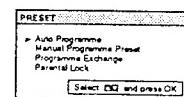
If you have made a mistake  
Press  $\leftarrow$  to go back to the previous position.

To return to the main menu  
Keep pressing  $\leftarrow$ .

To tune in a channel by frequency  
After selecting F in step 6, enter three digits using the number buttons.

### Preset channels manually

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The PRESET menu appears. (See Fig. 9.)
- 3 Select "Manual Programme Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 10.)
- 4 Using  $\Delta+$  or  $\nabla-$ , select the programme position (number button) to which you want to preset a channel, and press OK.
- 5 Select, if necessary, the TV broadcast system (B/G for western European countries, D/K for eastern European countries) or a video input source (EXT) with  $\Delta+$  or  $\nabla-$ . Then press OK. The CH position will be displayed in red on a black background. (See Fig. 11.)
- 6 Using  $\Delta+$  or  $\nabla-$ , select C (to preset a regular channel), S (to preset a cable channel), or F (to tune in by frequency) and press OK. The first element of the "CH" number will be displayed in red on a black background.
- If you have selected EXT in step 4, select the video input source with  $\Delta+$  or  $\nabla-$ . (See Fig. 12.)
- There are two ways to preset channels. If you know the channel number, go to step "7-Manual".  
 or  
 If you don't know the channel number, go to step "8-Search".
- 7 Manual
  - a Select the first element of the "CH" number with  $\Delta+$  or  $\nabla-$  or the number buttons and press OK. The second element of the "CH" number will be displayed in red on a black background.
  - b Select the second element of the number with  $\Delta+$  or  $\nabla-$  or the number buttons. The selected number appears. (See Fig. 13.)
  - c Press OK. The "SEARCH" position is highlighted and the selected channel is now stored. (See Fig. 14.)
  - d Press OK until the cursor appears by the next programme position.
  - e Repeat steps 3 to 7 to preset other channels.
- 8 Search
  - a Press OK repeatedly until the colour of the SEARCH position changes.
  - b Start searching for the channel with  $\Delta+$  (up) or  $\nabla-$  (down). The CH position changes colour. (See Fig. 15.) The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 16.)
  - c Press OK if you want to store this channel. If not, press  $\Delta+$  or  $\nabla-$  to continue channel searching.
  - d Press OK until the cursor appears by the next programme position.
  - e Repeat steps 3 to 7 to preset other channels.
- 9 Press MENU to return to TV picture.



This section shows you additional presetting functions such as exchanging or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

You can skip this section, if not needed.

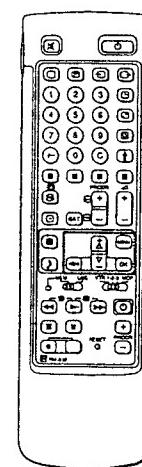
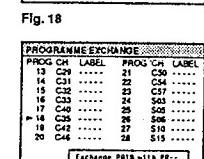
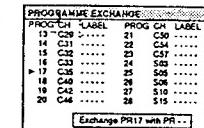
### Before you begin

- Check that the Full Function side of the Remote Commander is visible.
- Locate the Menu operation buttons.

### Exchanging Programme Positions

With this function, you can exchange the programme positions to a preferable order.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The PRESET menu appears.
- 3 Select "Programme Exchange" with  $\Delta+$  or  $\nabla-$  and press OK. The PROGRAMME EXCHANGE menu appears. (See Fig. 17.)
- 4 Using  $\Delta+$  or  $\nabla-$ , select the programme position you want to exchange with another and press OK. The colour of the selected position changes. (See Fig. 18.)
- 5 Using  $\Delta+$  or  $\nabla-$ , select the programme position to be exchanged and press OK. Now the two programme positions have been exchanged. (See Fig. 19.)
- 6 Repeat steps 4 and 5 to exchange other programme positions.
- 7 Press MENU to return to TV picture.



For programme positions beyond 15  
The display scrolls automatically.

If you have made a mistake  
Press  $\leftarrow$  to go back to the previous position  
To go back to main menu  
Keep pressing  $\leftarrow$ .

### Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

- 1 Press C on the Remote Commander. For cable channels, press C twice. The indication "C" ("S" for cable channels) appears on the screen. (See Fig. 20.)
- 2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4). The channel appears. However, the channel will not be stored.

#### MANUAL PROGRAMME PRESET

You can skip unused programme positions when selecting programmes with the PROGR +/- buttons. However, the skipped programmes may still be called up when you use the number buttons.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The PRESET menu appears.
- 3 Select "Manual Programme Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig.21.)
- 4 Using  $\Delta+$  or  $\nabla-$ , select the programme position which you want to skip and press OK. The "SYS" position changes colour.
- 5 Press  $\Delta+$  or  $\nabla-$  until "----" appears in the SYSTEM position. (See Fig. 22.)
- 6 Press OK. (See Fig.23.) When you select programmes using the PROGR+/-buttons, the programme position will be skipped.
- 7 Repeat steps 4 to 6 to skip other programme positions.
- 8 Press MENU to return to TV picture.

If you have made a mistake  
Press  $\leftarrow$  to go back to the previous position.  
To go back to main menu  
Keep pressing  $\leftarrow$ .



MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 21

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 22

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 23

#### MANUAL PROGRAMME PRESET

You can "name" a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The PRESET menu appears.
- 3 Select "Manual Programme Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 24.)
- 4 Using  $\Delta+$  or  $\nabla-$ , select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.
- 5 Select a letter or number with  $\Delta+$  or  $\nabla-$  and press OK. The next element will be highlighted. Select other characters in the same way. If you want to leave an element blank, select  $\leftarrow$  and press OK. (See Fig. 25.)
- 6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin). Now the caption you chose is stored. (See Fig. 26.)
- 7 Repeat steps 5 and 6 to caption names for other channels.
- 8 Press MENU to return to TV picture.

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 24

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 25

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 26

#### MANUAL PROGRAMME PRESET

#### Manual Fine-Tuning

Normally, the AFT (automatic fine-tuning) is already operating. However, if the picture is distorted, you can use the manual fine tuning function to obtain better picture reception.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The PRESET menu appears.
- 3 Select "Manual Program Preset" with  $\Delta+$  or  $\nabla-$  and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 27.)
- 4 Using  $\Delta+$  or  $\nabla-$ , select the programme position corresponding to the channel which you want to manually fine-tune, and press OK repeatedly until the AFT position changes colour.
- 5 Fine-tune the channel with  $\Delta+$  or  $\nabla-$  so that you get the best TV reception. As you press the cursor buttons, the frequency changes from -15 to +15. (See Fig. 28.)
- 6 After fine tuning, press OK. The cursor appears beside the next programme position (at the left margin). (See Fig. 29.) Now the fine-tuned level is stored.
- 7 Repeat steps 4 to 6 to fine-tune other channels.
- 8 Press MENU to return to TV picture.

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 27

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 28

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C21 [off] ..... [on]
14	B/G	C22 [off] ..... [on]
15	B/G	C23 [off] ..... [on]
16	B/G	C24 [off] ..... [on]
17	B/G	C25 [off] ..... [on]
18	B/G	C26 [off] ..... [on]
19	B/G	C27 [off] ..... [on]
20	B/G	C28 [off] ..... [on]
21	B/G	C29 [off] ..... [on]
22	B/G	C30 [off] ..... [on]

Fig. 29

#### PARENTAL LOCK

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with  $\Delta+$  or  $\nabla-$  and Press OK. The PRESET menu appears.
- 3 Select "Parental Lock" with  $\Delta+$  or  $\nabla-$  and press OK. The PARENTAL LOCK menu appears. (See Fig. 30.)
- 4 Using  $\Delta+$  or  $\nabla-$ , select the programme position you want to block and press OK. The selected PROG number, CH and LABEL change colour and the TV picture disappears indicating that this programme is now blocked. (See Fig. 31.)
- 5 Repeat step 4 to block other programme positions.
- 6 Press MENU to return to TV picture.

#### Cancelling blocking

- 1 On the PARENTAL LOCK menu, select the programme position you want to unblock with  $\Delta+$  or  $\nabla-$ .
- 2 Press OK. The selected PROG number, CH and LABEL change colour to normal colour and the TV picture appears indicating that the blocking has been cancelled.

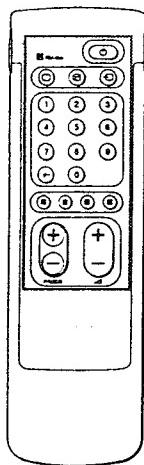
PARENTAL LOCK		
PROG	CH	LABEL
13	C29	.....
14	C30	.....
15	C32	.....
16	C33	.....
17	C34	.....
18	C35	.....
19	C36	.....
20	C37	.....
21	C38	.....
22	C39	.....
23	C40	.....
24	C51	.....
25	C52	.....
26	C53	.....
27	C54	.....
28	C55	.....
29	C56	.....
30	C57	.....

Fig. 30

PARENTAL LOCK		
PROG	CH	LABEL
13	C29	.....
14	C30	.....
15	C32	.....
16	C33	.....
17	C34	.....
18	C35	.....
19	C36	.....
20	C37	.....
21	C38	.....
22	C39	.....
23	C40	.....
24	C51	.....
25	C52	.....
26	C53	.....
27	C54	.....
28	C55	.....
29	C56	.....
30	C57	.....

Fig. 31

## 1-5. WATCHING THE TV



This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.

### Switching the TV on and off

#### *Switching on*

Depress  $\odot$  on the TV.

#### *Switching off temporarily*

Press  $\odot$  on the Remote Commander.  
The TV enters standby mode and the standby indicator on the front of the TV lights up.

To switch on again

Press  $\odot$ , PROGR +/-, or one of the number buttons on the Remote Commander.

#### *Switching off completely*

Depress  $\odot$  on the TV.

### Selecting TV Programmes

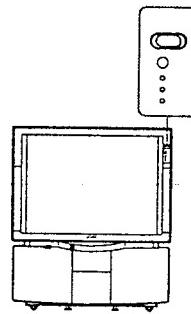
Press PROGR +/- or press the number buttons.

#### *To select a double-digit number*

Press  $\text{--}/\text{--}$ , then the numbers.  
For example, if you want to choose 23, press  $\text{--}/\text{--}$ , 2, and 3.

### Adjusting the Volume

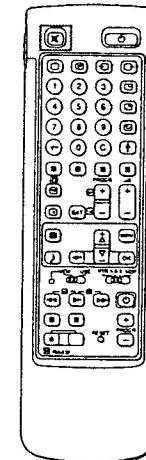
Press  $\Delta \text{ +/-}$ .



If no picture appears when you depress  $\odot$  on the TV and if the standby indicator on the TV is lit, the TV is in standby mode.  
Press  $\odot$  or one of the number buttons to switch it on.

For details of the teletext operation, refer to page 19.

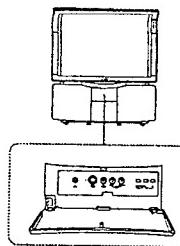
For details of the video input picture, refer to page 23.



## Operating the TV Using the Buttons on the TV

With the  $\text{--}/\text{+}$  buttons on the TV, you can select programmes, adjust the volume, and select video input sources.

- 1 Press the  $\text{P} \text{--}/\text{+}$  button repeatedly until the programme number,  $\Delta$  (for volume), or  $\ominus$  (for video input picture) appears. Then adjust with the  $\text{--}/\text{+}$  buttons.
- 2 Press the  $\text{--}/\text{+}$  buttons to switch on the TV from the standby mode.
- 3 Press  $\text{--}/\text{+}$  simultaneously to reset picture and sound controls to the factory preset level (RESET function).



### Watching Teletext or Video Input

#### *Watching teletext*

- 1 Press  $\ominus$  to view the teletext.
- 2 For teletext operation, enter a 3-digit page number with the number buttons to select a page.  
For fasttext operation, press one of the coloured buttons.  
For both operations, press  $\ominus$  (PAGE +) for the next page or  $\oplus$  (PAGE -) for the preceding page.

- 3 To go back to the normal TV picture, press  $\odot$ .

#### *Watching a video input picture*

- 1 Press  $\ominus$  repeatedly until the desired video input appears.
- 2 To go back to the normal TV picture, press  $\odot$ .

### More Convenient Functions

Use the Full-Function side of the Remote Commander.

#### *Displaying the on screen indications*

- Press  $\odot$  once to display all the indications. They will disappear after a few seconds.
- Press  $\odot$  twice to have the programme number and label stay on screen. Press twice again to make the indications disappear.

#### *Muting the sound*

Press  $\times$ .  
To resume normal sound, press  $\times$  again.

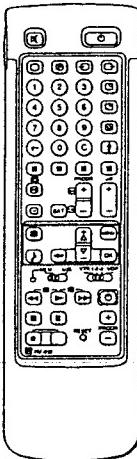
#### *Displaying the time*

Press  $\odot$ . This function is available only when teletext is broadcast.  
To make the time display disappear, press  $\odot$  again.

## 1-6. ADJUSTING AND SETTING THE TV USING THE MENU

### PICTURE CONTROL

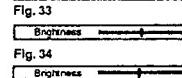
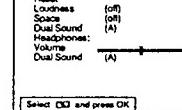
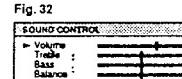
### SOUND CONTROL



#### Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste, in addition, you can change the aspect ratio of the TV display for wide screen effect or set the resolution to obtain a higher quality picture. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones.

- 1 Press **■** (for picture) or **△** (for sound) on the remote Commander.  
or  
Press MENU and select "Picture Control" or "Sound Control", then press OK. The PICTURE CONTROL or SOUND CONTROL menu appears. (See Fig. 32 or Fig. 33.)
- 2 Using **△+** or **▽-**, select the item you want to adjust and press OK. The selected item changes colour. (See Fig. 34.)
- 3 Adjust the setting with **△+** or **▽-** and press OK. The cursor appears beside the next item (at the left margin). (See Fig. 35.)  
For the effect of each control, see the table below.
- 4 Repeat steps 2 and 3 to adjust other items.
- 5 Press MENU to return to TV picture.



#### Effect of each control

PICTURE CONTROL	Effect
Contrast	Less — More
Brightness	Darker — Brighter
Colour	Less — More
Hue	Greenish — Reddish
Sharpness	Softer — Sharper
Reset	Resets picture to the factory preset levels.
Format	(4:3)
Resolution	(high)

If you have made a mistake  
Press **←** to go back to the previous position.

To go back to the main menu  
Keep pressing **←**.

Note  
HUE is only available for NTSC colour systems and RESOLUTION does not work for SECAM colour systems.

Note on LINE OUT  
The audio level and the dual sound mode output from the G-jack on the rear correspond to the Headphone VOLUME and DUAL SOUND settings.

When watching a video input picture  
You can select DUAL SOUND to change the sound.

SOUND CONTROL	Effect
Volume	Less — More
Treble	Less — More
Bass	Less — More
Balance	More left — More right
Reset	Resets sound to the factory preset levels.
Loudness	off: Normal on: When listening to low volume sound.
Space	off: Normal on: Obtain acoustic sound effect.
Dual Sound	A: left channel B: right channel Stereo mono
Headphones :	The selected mode of the A-CD-B Indicator on the TV lights up.
Volume	Less — More
Dual Sound	A: left channel B: right channel Stereo mono

Note

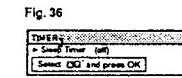
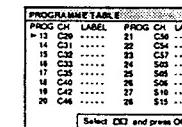
This TV cannot select any format other than 4:3.

### PROGRAMME TABLE

#### Using the Programme Table

On this table, you can see which channel is preset to which programme position. You can also select programmes using this table.

- 1 Press MENU to display the main menu.
- 2 Select "Programme Table" with **△+** or **▽-** and press OK. The PROGRAMME TABLE menu appears. (See Fig. 36.)
- 3 Select the programme number with **△+** or **▽-** and press OK. The selected programme appears.
- 4 To scroll to higher programme numbers, press **▽-**.
- 5 Press MENU to return to TV picture.



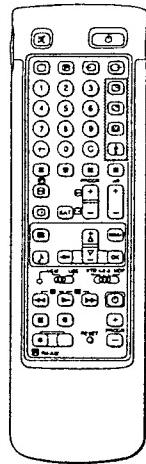
### TIMER

#### Using the Sleep Timer

You can select a time period after which the TV automatically switches into standby mode.

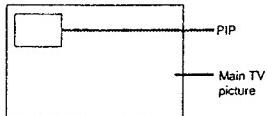
- 1 Press MENU to display the main menu.
- 2 Select "Timer" with **△+** or **▽-** and press OK. The TIMER menu appears. (See Fig. 37.)
- 3 Press OK. The time period option changes colour.
- 4 Select the time period with **△+** or **▽-**. The time period (in minutes) changes as follows:  
10 → 20 → 30 → 40 → 50 → 60 → 70 → 80 → 90
- 5 After selecting the time period, press OK. The cursor moves back to the left margin and the timer starts counting. One minute before the TV switches into standby mode, a message is displayed on the screen.
- 6 Press MENU to return to TV picture.

## 1-7. PIP (PICTURE IN PICTURE)



**Note**  
RGB input source  
cannot be displayed in  
PIP.

With this function you can display a "PIP screen" (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VTR) while watching TV or vice versa. For information about connection of other equipment, refer to page 22.



### Switching PIP on and off

Press **C**.

The PIP screen will be displayed. The PIP picture will come from the source chosen when the TV was last used.

To Switch PIP off

Press **C** again.

### Selecting a PIP source

- 1 Press **t**.  
The symbol **t** will be displayed at the bottom, left-hand corner of the screen.
- 2 Press **-C** repeatedly until the desired PIP source is indicated (e.g. TV, AV1, AV2, YC2, AV3, YC3, AV4, YC4).

**Note**

If no video source has been connected, the PIP picture will be noisy.

### Swapping screens

Press **C**.

The main screen will switch the picture with the PIP screen.

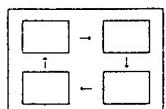


### Notes

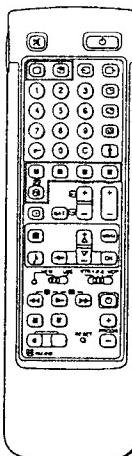
- If a TV programme is on the PIP screen and a video source on the main picture, and you want to change channels, first press **t** and then the programme number buttons or PROGR +/-.
- Swapping screens takes about 2 seconds after pressing **C**.
- After swapping screens if the colour systems of the main and PIP pictures are different, the PIP picture first appears in black and white and then in colour.

### Changing the position of the PIP

Press **C** repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.



## 1-8. TELETEXT



**Note**  
Teletext errors may  
occur if the broadcasting  
signals are weak.

**With the simple side of the Remote Commander**  
You can switch teletext on and off, operate Fastext, and directly select page numbers.

TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.

### Direct Access Functions

#### Switching Teletext on and off

- 1 Select the TV channel which carries the teletext broadcast you want to watch.
- 2 Press **B** to switch on teletext.  
A teletext page will be displayed (usually the index page). If there is no teletext broadcast, "No text available" is displayed on the information line at the top of the screen.

#### To switch teletext off

Press **C**.

#### Selecting a teletext page

##### With direct page selection

Use the number buttons to input the three digits of the chosen page number.  
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

##### With page-catching

- 1 Select a teletext page with a page overview (e.g. index page).
- 2 Press **B** twice. "Page catching" will be displayed on the information line. The last digit of the first displayed page number flashes.
- 3 Using **Δ** or **▽**, select the desired page and press **OK**. The requested page will appear in a few seconds.

#### Accessing next or preceding page

Press **B** (PAGE+) or **C** (PAGE-).  
The next or preceding page appears.

#### Superimposing the teletext display on the TV programme

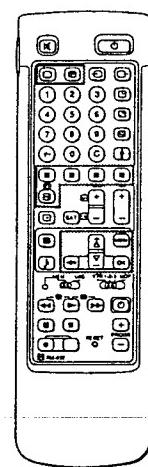
- Press **B** once in teletext mode or twice in TV mode.
- Press **B** again to resume normal teletext reception.

#### Preventing a teletext page from being updated

- Press **B** (HOLD). The HOLD symbol "**H**" is displayed on the information line.
- Press **B** to resume normal teletext reception.

#### Using Fastext

With Fastext you can access pages with one key stroke.  
When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.  
Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after a few seconds.



**Note**  
Some of the features  
may not be available  
depending on the  
Teletext service.

Press OK to select  
'OFF' for the TIME  
PAGE setting to cancel  
the request.

## Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

- 1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 38.)
- 2 Using  $\Delta+$  or  $\nabla-$ , select the teletext function you want and press OK. (See Fig. 39.)

### USER PAGES/PRESET USER PAGES

See page 21 for information about presetting and operating the user pages.

### INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

### TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display. After selecting the function, an information line △ Top ▽ Bottom OK Full will be displayed. (See Fig. 40.)

Press  $\Delta+$  or Top for the upper half,  $\nabla-$  for Bottom to enlarge the lower one and OK for Full to resume the normal size. Press  $\odot$  to resume normal teletext reception.

### TEXT CLEAR

After selecting the function, you can watch a TV programme while waiting for a teletext page to be displayed. (See Fig. 41.)

Press  $\odot$  to resume normal teletext reception.

### SUBTITLES

Your teletext service will inform you if a TV programme is subtitled. After having selected the function the subtitles will be displayed.

### REVEAL

Sometimes Pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After selecting the function, an information line Reveal on/off will be displayed. (See Fig. 42.)

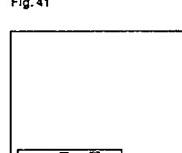
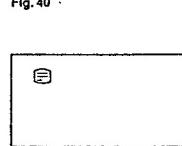
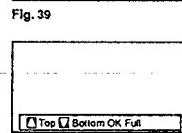
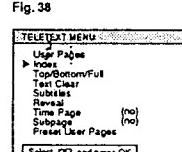
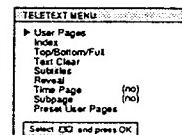
Using  $\Delta+$  or  $\nabla-$ , select ON to reveal the information of OFF to conceal it again.

Press  $\odot$  to resume normal teletext reception.

### TIME PAGE

Your teletext service will inform you, if a time coded page is available. You may have a page (e.g. an alarm page) displayed at a certain time.

- 1 Using  $\Delta+$  or  $\nabla-$ , select "ON". Press OK. The TV programme you were watching before you selected TIME PAGE is restored. An information window will be displayed at the bottom of the page.
- 2 To select the desired page, enter three digits for the page number (e.g. 301) using the number buttons and press OK.
- 3 To select the desired time, enter four digits for the desired time (e.g. 1800) using the number buttons and press OK. The selected time is displayed at the top in the left-hand corner. At the requested time, the page will be displayed. Press  $\odot$  to resume normal teletext mode.



To cancel the request  
Select SUBPAGE and  
press OK.

If two broadcasting  
stations use the same  
Teletext  
You can preset one  
bank to 2 different  
programme positions.

### SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. After having selected the function, an information line will be displayed.

To select the desired subpage, enter four digits using PROGR. +/- or the number buttons (e.g. enter 0002 for the second page of a sequence).

## User Page Bank System

You can store up to 30 pages in the "teletext page bank system" in this way you have quick access to the pages you watch frequently.

### Storing pages

There are 5 "banks" (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (P1 to P6).

- 1 Press  $\odot$  (if Teletext is not already on) and MENU to show the TELETEXT MENU display.
- 2 Select "Preset User Pages" with  $\Delta+$  or  $\nabla-$  and press OK.
- 3 Select the desired bank with  $>+$  or  $<-$  and press OK. The cursor will go to the first position (p1) of the preferred pages.
- 4 Input the three digits of your first preferred page with the number buttons. The cursor will go to the second position.
- 5 Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press OK without inserting any number.
- 6 Select "Allocate Bank" with  $\Delta+$  or  $\nabla-$  and press OK.
- 7 Select the programme position on which you want to store the preset pages with  $\Delta+$  or  $\nabla-$  and press OK. (See Fig. 43)
- 8 Select the desired bank with  $\Delta+$  or  $\nabla-$  (Banks A to E are available) and press OK.
- 9 Repeat steps 3 to 8 for the other 4 banks available.



Fig. 43

### Displaying User Pages.

- 1 Select MENU.
- 2 Select "User Pages" with  $\Delta+$  or  $\nabla-$  and press OK. A table of the stored preferred pages will be displayed. (See Fig. 44.)
- 3 Select the desired page with  $\Delta+$  or  $\nabla-$  and press OK. The page will be displayed after some seconds.

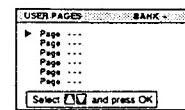
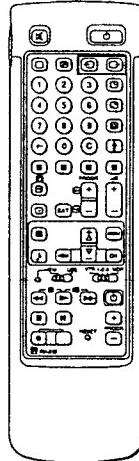


Fig. 44

**Selecting Input with PROGR +/- or number buttons**  
 You can preset video input sources to the programme positions so that you can select them with PROGR +/- or number buttons. For details, see "Preset channels manually" on page 10.



## Selecting input and output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

### Selecting input

Press  $\square$  repeatedly to select the input source.

The symbol of the selected input source will appear. (See Fig. 45.)

To go back to the normal TV picture

Press  $\square$ .

### Input modes

Symbol	Input signal
$\square$ 1	Audio/video input through the $\square$ 1 connector
$\square$	Audio/RGB input through the $\square$ 1 connector
$\square$ 2	Audio/video input through the $\square$ 2 / $\square$ 2 connector
$\square$ 2	Audio/S video input through the $\square$ 2 / $\square$ 2 or $\square$ 2 connector (4-pin connector)
$\square$ 3	Audio/video input through $\square$ 3 and $\square$ 3 on the front
$\square$ 3	Audio/S video input through the $\square$ 3 (4-pin connector) and $\square$ 3 connectors
$\square$ 4	Audio/video input through the $\square$ 4 / $\square$ 4 connector
$\square$ 4	Audio/S video input through the $\square$ 4 / $\square$ 4 or $\square$ 4 connector (4-pin connector)

You can also select the input mode using the  $P$ ,  $\square$ ,  $\square$ , and  $\square$  buttons on the TV. In this case, first select  $\square$ , and then press  $\square$  buttons to select the input.

### Selecting the output

The  $\square$  2 /  $\square$  2 connector outputs the source input from the other connectors.

Press  $\square$  repeatedly to select the output.

The symbol of the selected output source appears. (See Fig. 46.)

### Output modes

Symbol	Output mode
1 $\square$	Audio/video signal from the $\square$ 1 connector
2 $\square$	Audio/video signal from the $\square$ 2 / $\square$ 2 connector
2 $\square$	Audio/S video signal from the $\square$ 2 / $\square$ 2 or $\square$ 2 connector (4 pin)
3 $\square$	Audio/video signal from the $\square$ 3, $\square$ 3 connectors
3 $\square$	Audio/S video signal from the $\square$ 3, $\square$ 3 connectors
4 $\square$	Audio/video signal from the $\square$ 4 / $\square$ 4 connector
4 $\square$	Audio/S video signal from the $\square$ 4 / $\square$ 4 or $\square$ 4 connector (4 pin)
TVC	Audio/video signal from the TV aerial terminal



Fig. 45

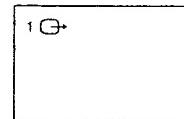


Fig. 46

## Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen and PIP screen, and which output source is selected. You can also select them on the menu display.

- 1 Press MENU to display the main menu.
- 2 Select "VIDEO CONNECTION" with  $\Delta$  or  $\nabla$  and press OK. The VIDEO CONNECTION menu appears. (See Fig. 47.) You can see which source is selected for the TV and PIP input and for the output. If you want to select the input and output on this menu, go to the next step.
- 3 Select TV-screen (input source for the TV screen), PIP (input source for the PIP screen), or Output (output source) with  $\Delta$  or  $\nabla$  and press OK. One of the source items changes colour. (See Fig. 48.)
- 4 Select the desired source with  $\Delta$  or  $\nabla$ . (See Fig. 49.) For details about each source, see the table on page 23.
- 5 Press OK. The selected source is confirmed, and the cursor appears. (See Fig. 50.)
- 6 Repeat steps 2 to 4 to select the source for other inputs or outputs.
- 7 Press MENU to return to TV picture.

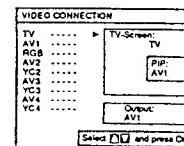


Fig. 47

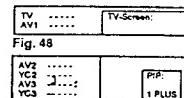


Fig. 48

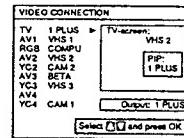


Fig. 49



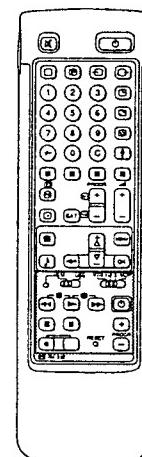
Fig. 50

## Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most of Sony remote-controlled video equipment such as: Beta, 8 mm and VHS VTRs and video disc players.

### Tuning the Remote Commander to the equipment

- 1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:  
 VTR1: Beta VTR  
 VTR2: 8 mm VTR  
 VTR3: VHS VTR  
 MDP: Video disc player
- 2 Use the buttons indicated in the illustration to operate the additional equipment.  
 If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.  
 If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.



When recording when you use the  $\bullet$  (record) button, make sure to press this button and the  $\square$  to the right of it simultaneously.

## 1-10. FOR YOUR INFORMATION

### Remote Control of Non-sony equipment

The TV Remote Commander is programmable. This allows it to memorize the functions of other Remote Commanders using the keys shown in the illustration. A function may be set on any key and on any of the four positions of the VTR 1/2/3 MDP selector.

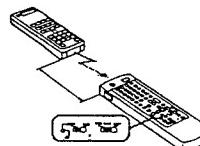
- Note**
- Do not move the two Remote Commanders during programming.
  - Once the programming has been completed, ensure that the new functions are working properly. Occasionally, a function cannot be memorized.
  - When replacing the batteries of the Remote Commander, the new functions will remain memorized for thirty minutes, even if the batteries are missing.

#### *Memorizing the functions of audio and video equipment not made by Sony.*

- 1 Set the MEM/USE selector to the MEM (programming) position.
- 2 Set the VTR 1/2/3 MDP selector to the desired position.
- 3 Arrange the two Remote Commanders facing each other as illustrated.
- 4 Press the TV Remote Commander button on which a function is to be programmed. The MEM indicator will light on the TV Remote Commander.  
Note: If the MEM indicator flashes 8 times, there is no more space in the memory.
- 5 Press the button on the other Remote Commander for the function that is to be memorized. The function will be memorized immediately after the MEM indicator goes off.
- 6 Repeat steps 4 and 5 for all the functions that are to be programmed. If all the buttons of one position of the VTR 1/2/3 MDP selector have been given new functions, you will be able to select a new position and proceed with the programming of the remaining functions.
- 7 Once programming has been completed, set the MEM/USE selector of the TV Remote Commander to the USE position.
- 8 When using audio or video equipment, confirm that the VTR 1/2/3 MDP selector of the TV Remote Commander is set to the same position as the one found during programming.

#### *Cancelling the programmed functions*

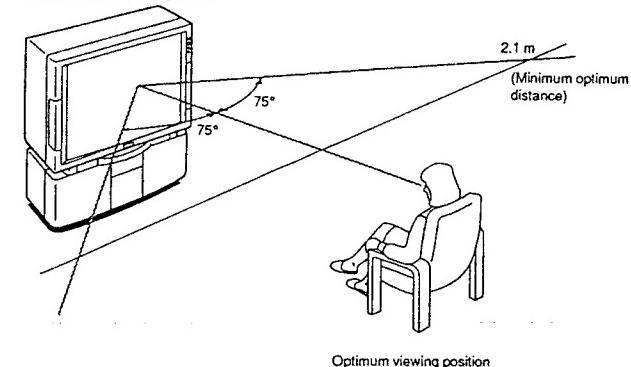
- 1 Set the MEM/USE selector to the MEM position.
- 2 Set the VTR 1/2/3 MDP selector to the position corresponding to the function that is to be deleted.
- 3 Press any programmable button. The MEM indicator will light.
- 4 Press the RESET button using a pencil. The MEM indicator will flash. Keep pressing the RESET button as long as the MEM indicator is flashing. All the functions programmed at this position will be deleted.
- 5 Set the MEM/USE selector to the USE position.



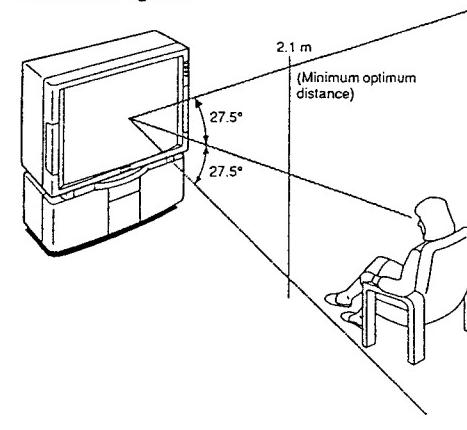
### Optimum Viewing Area

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

#### *Horizontal viewing area*



#### *Vertical viewing area*



## Troubleshooting

Here are some simple solutions to some problems which may affect the picture and sound.

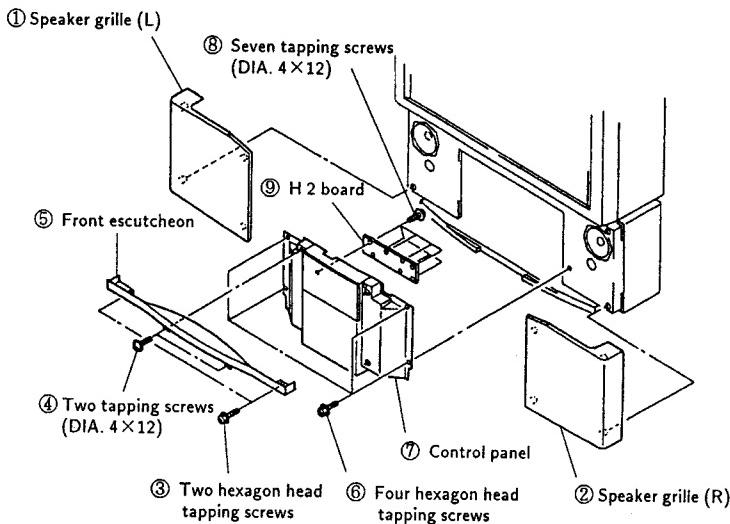
Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"><li>• Plug in the TV in.</li><li>• Press <math>\odot</math> on the TV (if <math>\odot</math> indicator is on, press <math>\odot</math> or a programme number on the Remote Commander).</li><li>• Check the aerial connection.</li><li>• Check if the selected video source is on.</li><li>• Turn the TV off for three or four seconds and then turn it on again using <math>\odot</math>.</li></ul>
Poor or no picture (screen is dark), but sound is OK	<ul style="list-style-type: none"><li>• Press <math>\blacksquare</math> to enter the PICTURE CONTROL menu and adjust the BRIGHTNESS, CONTRAST and COLOUR.</li></ul>
Good picture but no sound	<ul style="list-style-type: none"><li>• Press <math>\Delta +</math>.</li><li>• Check loudspeakers connection.</li><li>• If <math>\times</math> is displayed on the screen, press <math>\times</math>.</li></ul>
No colour for colour programmes	<ul style="list-style-type: none"><li>• Press <math>\blacksquare</math> to enter the PICTURE CONTROL menu, select RESET, then press OK.</li></ul>
Remote Commander does not function	<ul style="list-style-type: none"><li>• The batteries are weak.</li><li>• Set the MEM/USE selector to the USE position.</li></ul>

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

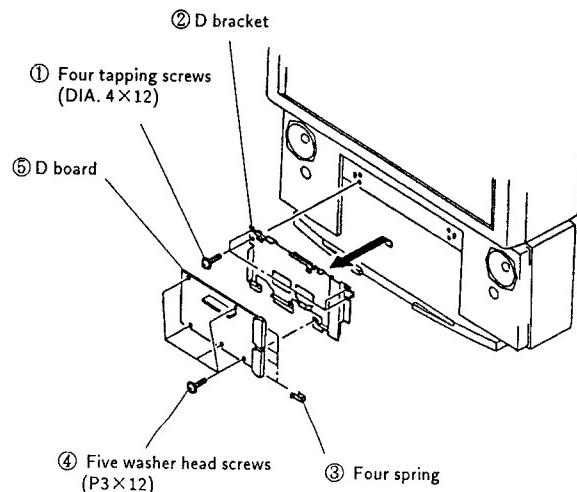
## SECTION 2

### DISASSEMBLY

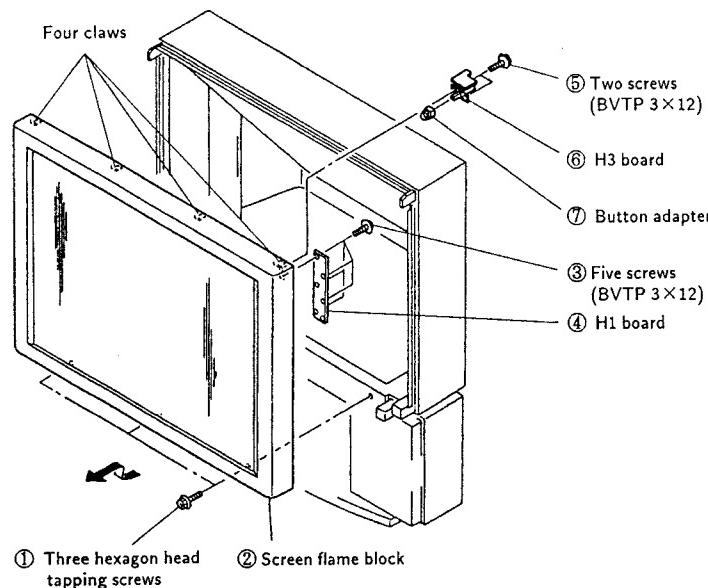
#### 2-1. H 2 BOARD REMOVAL



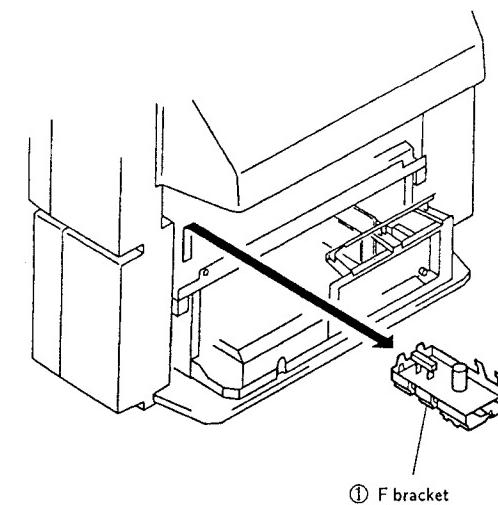
#### 2-2. D BOARD REMOVAL



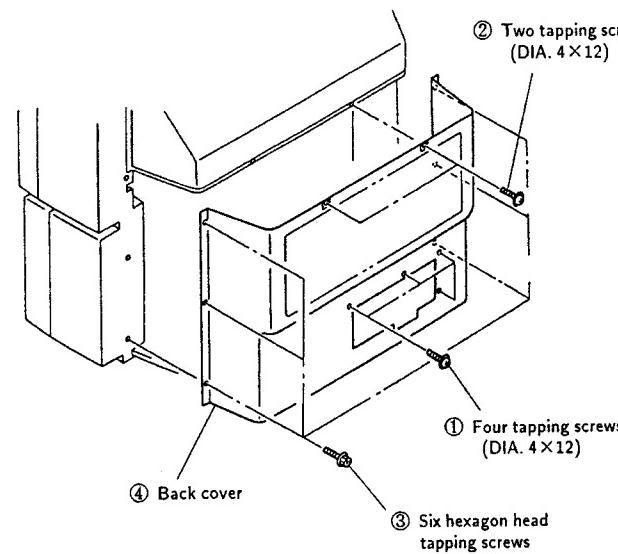
## 2-3. H1 AND H3 BOARDS REMOVAL



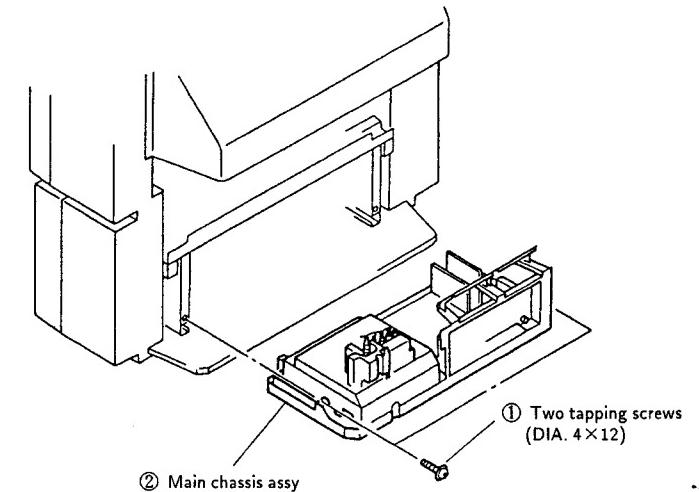
## 2-5. F BRACKET REMOVAL



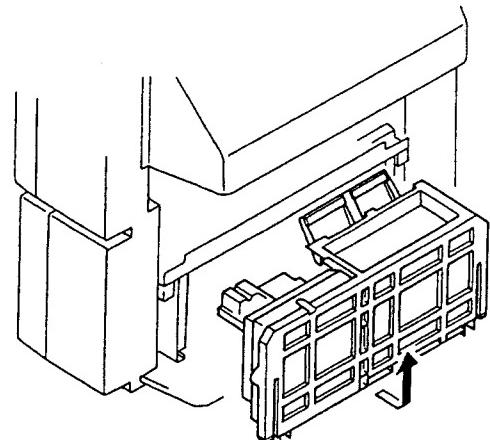
## 2-4. BACK COVER REMOVAL



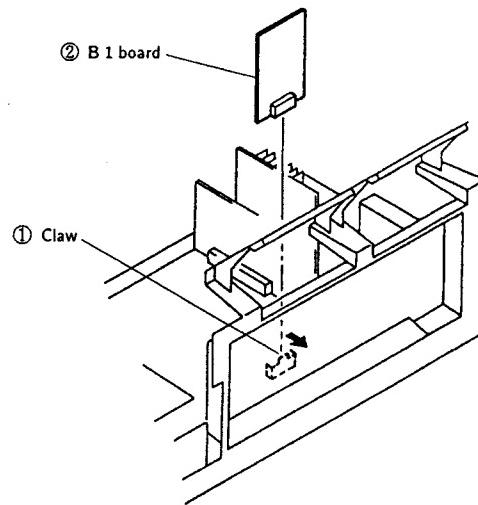
## 2-6. MAIN CHASSIS ASSY REMOVAL



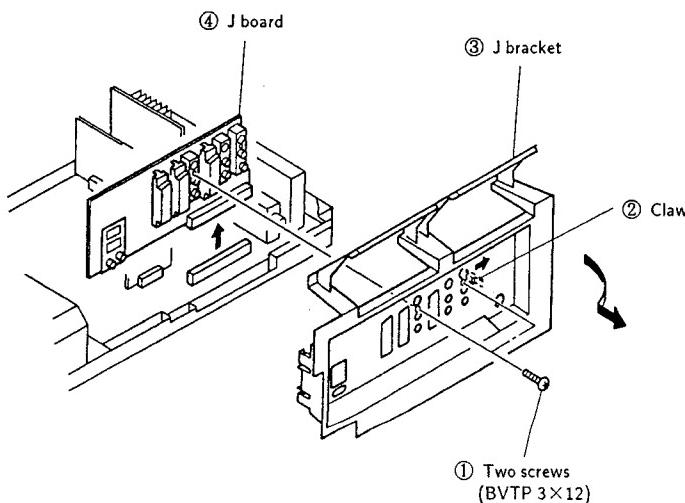
2-7. SERVICE POSITION



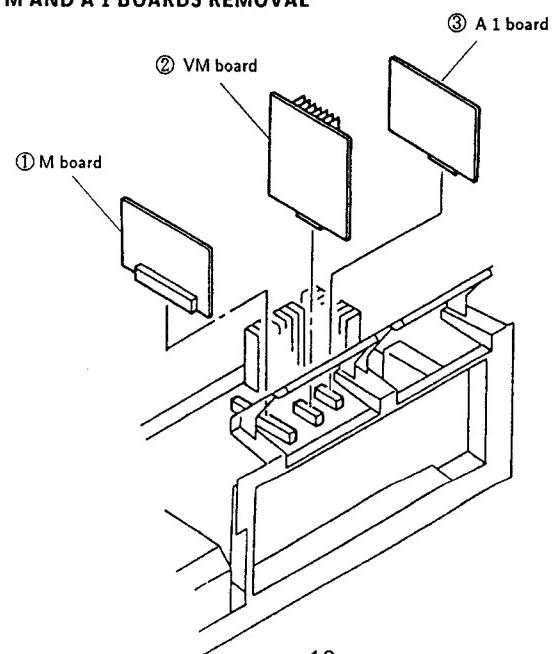
2-9. B 1 BOARD REMOVAL



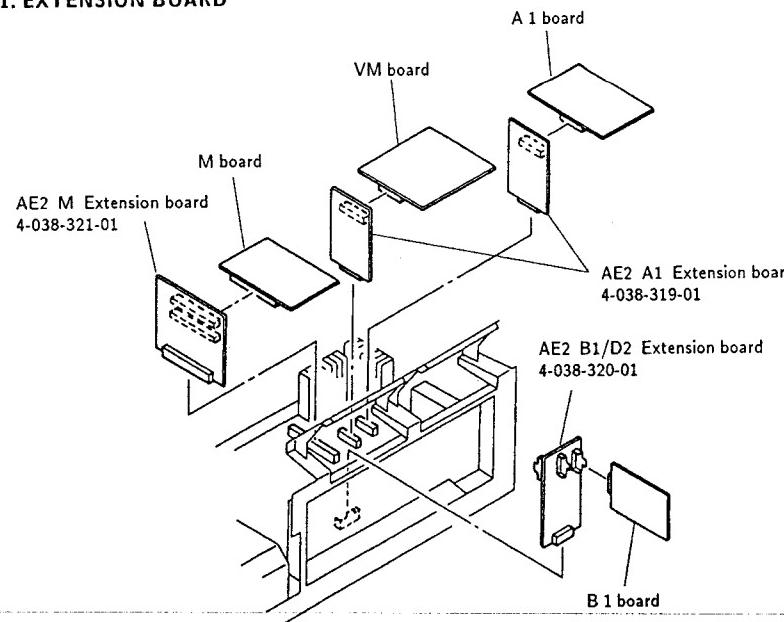
2-8. J BRACKET AND J BOARD REMOVAL



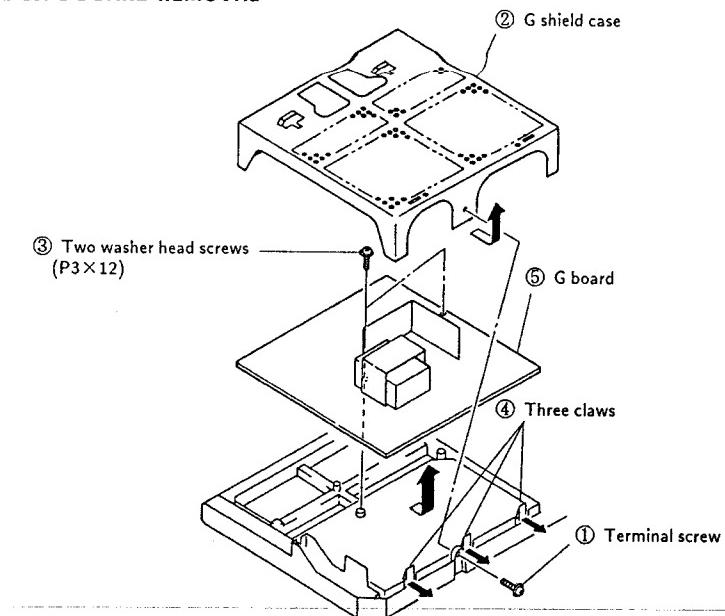
2-10. M, VM AND A 1 BOARDS REMOVAL



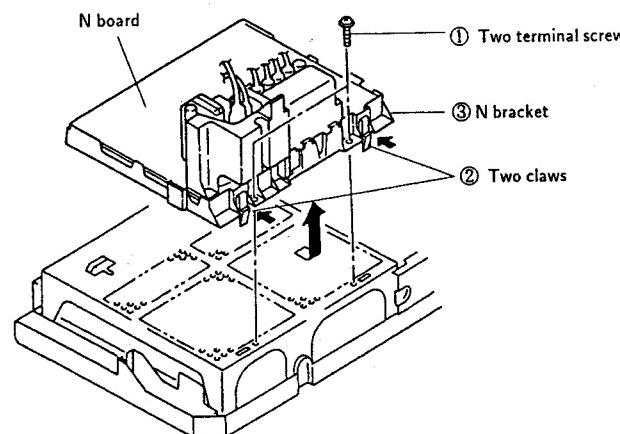
## 2-11. EXTENSION BOARD



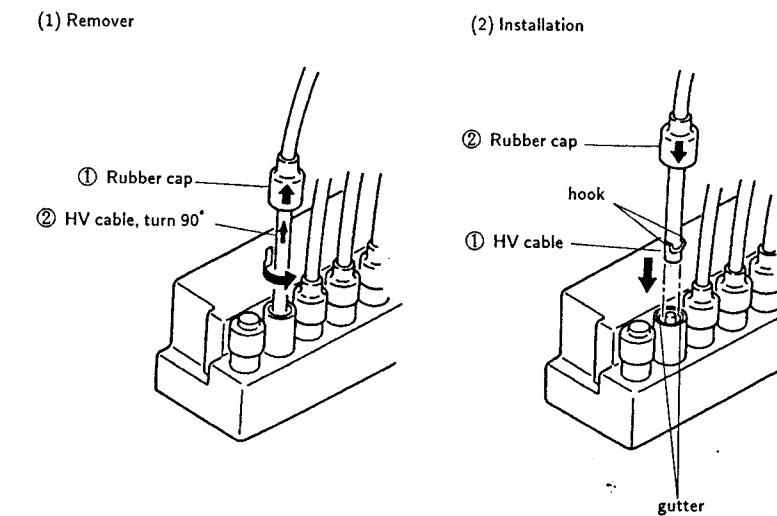
## 2-13. G BOARD REMOVAL



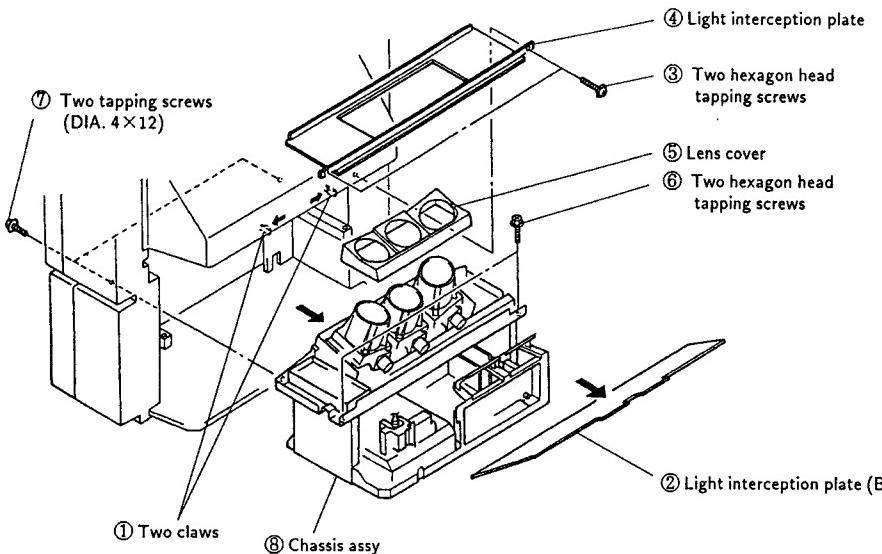
## 2-12. N BRACKET REMOVAL



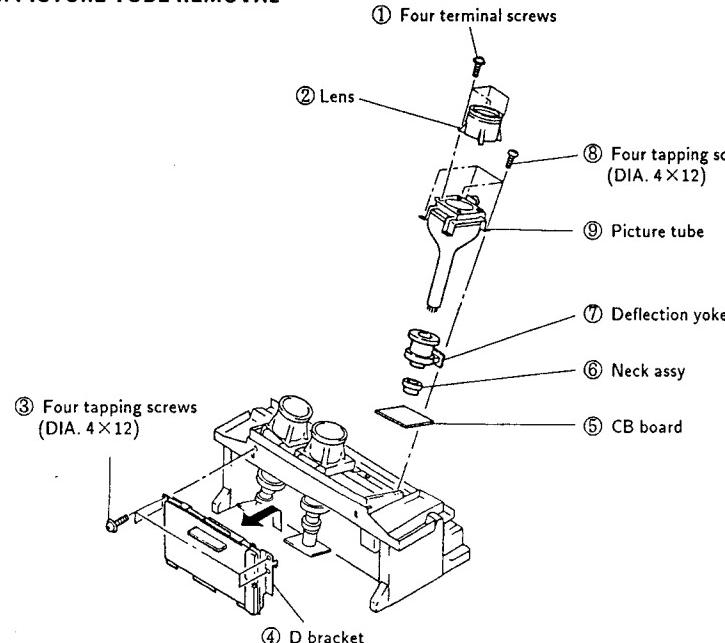
## 2-14. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



## 2-15. CHASSIS ASSY REMOVAL

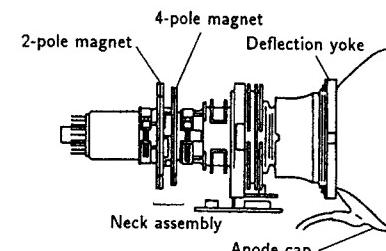


## 2-16. PICTURE TUBE REMOVAL

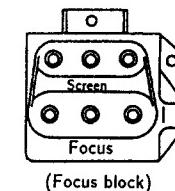
SECTION 3  
SET-UP ADJUSTMENTS

## 3-1. FOCUS LENS ADJUSTMENTS

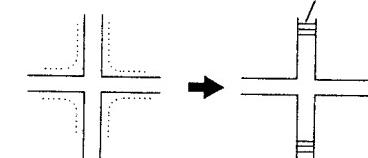
1. Set the D-board registration variable resistor (VR) and the position VR (CENTER VR) to mechanical.
2. Set the centering magnets (for red, green, and blue) to 0 as shown in the figure.



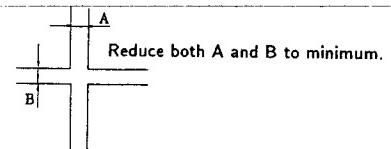
3. Input monoscope signal. Set 50% BRIGHTNESS and minimum PICTURE. Make rough adjustment so that 10IRE of the monoscope signal becomes faintly luminous.
4. Set PICTURE and BRIGHTNESS maximum. Press the commander menu button. Select CONVERGENCE to display test signal.
5. Enter service mode. Select R OFF of SERVICE MODE to cut off red output. Similarly, select B OFF to cut off blue output.
6. Turn the green lens to eliminate flare of the test signal.



Verify that scanning lines are seen.



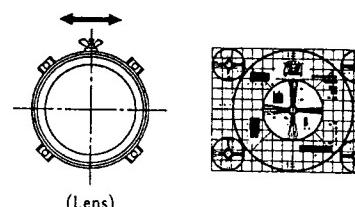
7. Turn the green focus VR in the focus block to adjust green focus to reduce both A and B of the test signal to minimum.



8. Repeat above 7. Couple of times to improve tracking and obtain an optimum lens focus. Then tighten the lens screws.

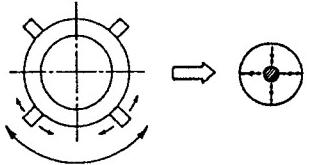
## 3-2. DEFLECTION YOKE POSITION ADJUSTMENTS

1. Input monoscope signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output. Similarly, select B OFF to cut off blue output.
3. Loosen the deflection yoke (DY) fitting screws. Tilt the DY to obtain the best horizontal and vertical monoscope patterns.
4. After adjustment, press the DY onto the cathode ray tube (CRT) funnel and tighten the screws.
5. Also adjust DY positions for red and blue outputs in the same way.

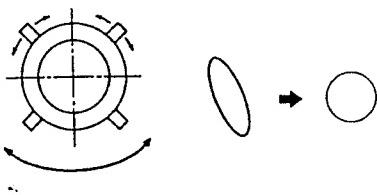


**3-3. 2-POLE MAGNET ADJUSTMENT**

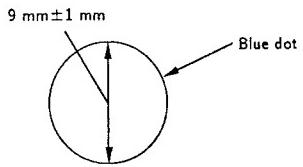
1. Input dot signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.  
Similarly, select B OFF to cut off blue output.
3. Set PICTURE to maximum. Turn the green focus variable resistor (VR) in the focus block counterclockwise to brighten the point in the dot.
4. Adjust the 2-pole magnet to position the bright point at the center of the dot.
5. Adjust the red and blue dots in the same way.

**3-4. 4-POLE MAGNET ADJUSTMENT**

1. Input dot signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.  
Similarly, select B OFF to cut off blue output.
3. Set PICTURE to maximum. Turn the green focus variable resistor (VR) in the focus block clockwise until the dot diameter becomes 15 mm to 20 mm.
4. Adjust the 4-pole magnet to make the dot perfectly round.
5. Adjust the red and blue dot in the same way.

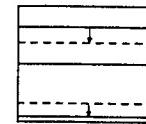
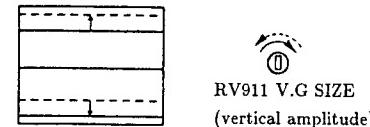
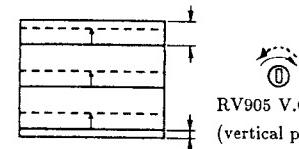
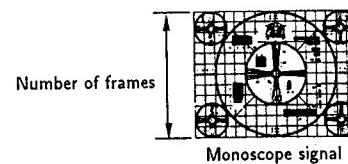
**3-5. DE-FOCUS ADJUSTMENT (BLUE)**

1. Input dot signal.
2. Turn the blue focus variable resistor (VR) in the focus block counter clock wise so that the diameter of the blue dot becomes  $9 \pm 1\text{mm}$ .

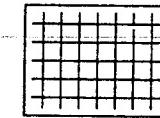
**3-6. GREEN PICTURE ADJUSTMENTS**

1. Input monoscope signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.  
Similarly, select B OFF to cut off blue output.
3. Turn RV913 and RV960, the vertical green linearity variable resistors (V.G LIN VRs) on the D-board, to obtain an optimum vertical linearity. Then turn RV911, the vertical green amplitude variable resistor (V.G SIZE VR) to set vertical amplitude to 11.7 frames.

Note: The vertical position indicator of the monoscope signal must be positioned at the center by adjusting RV905, the vertical green center position variable resistor (V.G CENT VR) in advance.



5. Verify that the horizontal lines on the top and bottom of cross-hatched area of the monoscope signal are horizontal and linear.

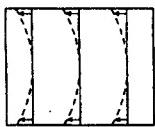
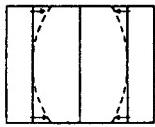
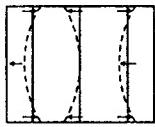
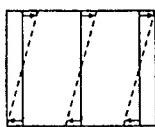
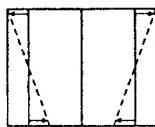
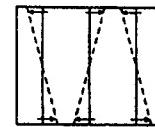
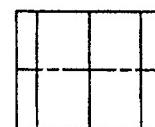
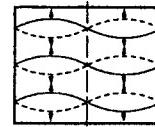
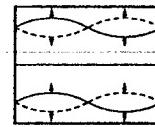
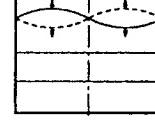
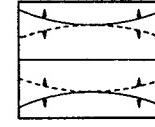
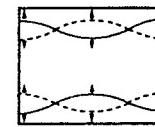
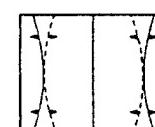


7. Input cross hatch signal.  
Turn vertical green (V.G) and horizontal green (H.G) variable resistors (VRs) and make adjustments according to the following steps :

## (Adjustment procedure)

1. [BOW] → [SKEW] → [CENT (center position)]
2. [PIN (pin warp)] → [SUB BOW] → [BOW]
3. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
4. [M.WAVE (middle sine wave warp)] → [WAVE-A (upper and lower sine wave warp)] → [WAVE-U (upper sine wave warp)]  
※ For vertical (V) only.
5. [V-M.PIN (vertical middle pin warp)] → [V/WING (vertical wing warp)]  
※ For vertical (V) only.
6. [H-M.PIN (horizontal middle pin warp)] → [WAVE-U (upper sine wave warp)]  
※ For horizontal (H) only.

(Dot motion)

RV932 H.G BOW  
(horizontal green bow)RV941 H.G PIN  
(horizontal green pin warp)RV950 H.G SUB BOW  
(horizontal green sub bow)V.G BOW.....RV935  
V.G PIN.....RV938  
V.G SUB BOW.....RV953RV920 H.G SKEW  
(horizontal green skew)RV925 H.G KEYS  
(horizontal green trapezoid)RV944 H.G SUB SKEW  
(horizontal green sub skew)V.G SKEW.....RV923  
V.G KEYS.....RV929  
V.G SUB SKEW.....RV947RV962 V-M-WAVE  
(vertical middle sine wave warp)RV975 V-WAVE-A  
(vertical upper and lower sine wave warp)RV978 V-WAVE-U  
(vertical upper sine wave warp)RV980 V.M. PIN  
(vertical middle pin warp)  
※ Common in red, green, and blueRV957 V/WING  
(wing warp)  
※ Common in red, green, and blueRV956 H/M. PIN  
(vertical middle pin warp)

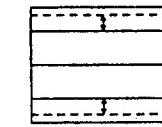
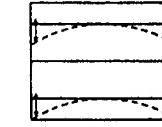
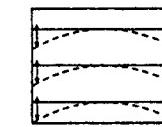
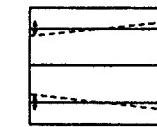
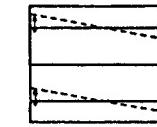
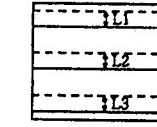
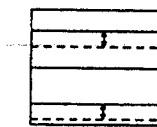
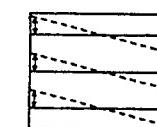
### 3-7. GREEN AND RED REGISTRATION ADJUSTMENTS

1. Input cross hatch signal.
2. Enter service mode. Select B OFF of SERVICE MODE to cut off blue output.
3. Turn the vertical red (V.R) and horizontal red (H.R) variable resistors (VRs) to adjust red picture convergence in relation to green picture according to the following steps :

(Adjustment procedure)

1. [LIN (linearity)] → [SIZE (amplitude)] → [CENT (center position)] → [BOW] → [SKEW] → [CENT (center position)]
2. [PIN (pin warp)] → [SUB BOW] → [BOW]  
[H/M. PIN (horizontal middle pin warp)]
3. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
4. [M.WAVE (middle sine wave warp)] → [WAVE-A (upper and lower sine wave warp)] → [WAVE-U (upper sine wave warp)]

(Dot motion)

RV912 V.B SIZE  
(vertical red amplitude)RV952 V.R SUB BOW  
(vertical red sub bow)RV943 V.R BOW  
(vertical red bow)RV928 V.R KEYS  
(vertical red trapezoid)RV948 V.R SUB SKEW  
(vertical red sub skew)RV904 V.R CENT  
(vertical red center position)RV917 V.R LIN  
(vertical red linearity)RV922 V.R SKEW  
(vertical red skew)

- H.R LIN.....RV915  
H.R SIZE.....RV907  
H.R CENT.....RV901  
H.R BOW.....RV931  
H.R SKEW.....RV919  
H.R PIN.....RV940  
H.R KEYS.....RV926  
H.R SUB BOW.....RV949  
H.R SUB SKEW.....RV943  
V-M-WAVE.....RV973  
V-WAVE-A.....RV976  
V-WAVE-U.....RV979  
V-M.PIN.....RV980  
V/WING.....RV957  
H/M.PIN.....RV956

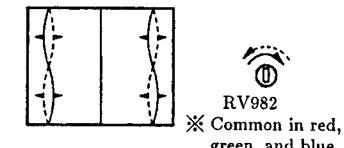
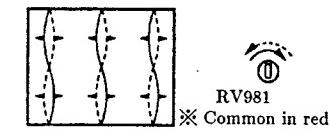
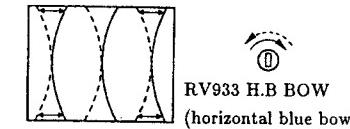
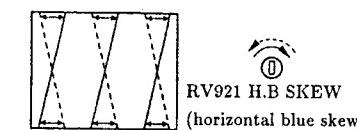
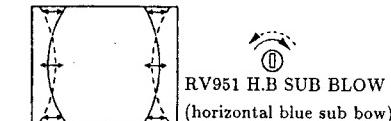
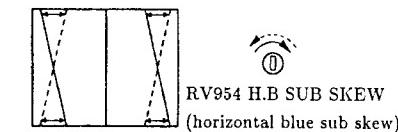
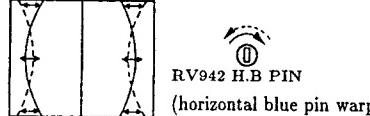
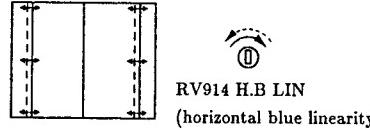
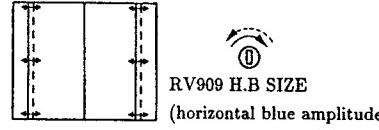
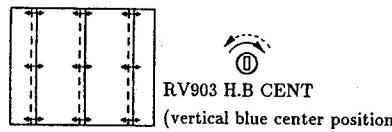
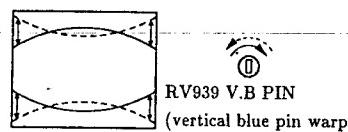
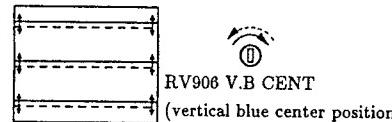
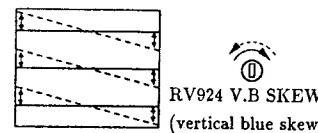
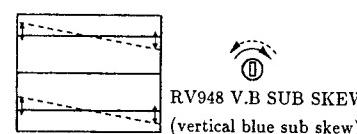
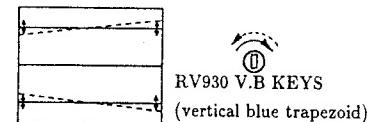
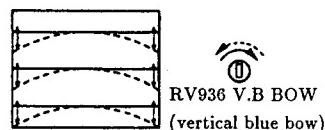
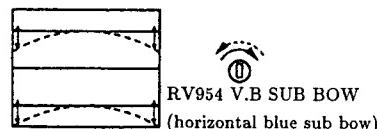
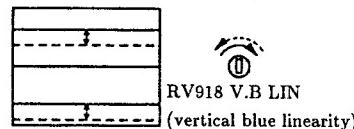
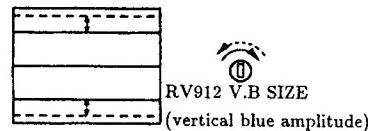
### 3-8. GREEN AND BLUE REGISTRATION ADJUSTMENTS

1. Input cross hatch signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
3. Turn the vertical blue (V.B) and horizontal blue (H.B) variable resistors (VRs) to adjust blue picture convergence in relation to green picture according to the following steps :

(Adjustment procedure)

1. [LIN (linearity)] → [SIZE (amplitude)] → [CENT (center position)] →
2. [BOW] → [SKEW] → [CENT (center position)]
3. [PIN (pin warp)] → [SUB BOW] → [BOW]  
[H/M. PIN (horizontal middle pin warp)]
4. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
5. [M.WAVE (middle sine wave warp)] →  
[WAVE-A (upper and lower sine wave warp)] →  
[WAVE-U (upper sine wave warp)] →

(Dot motion)



H/M PIN ..... RV958  
M.WAVE ..... RV961  
WAVE-A ..... RV974  
WAVE-U ..... RV977

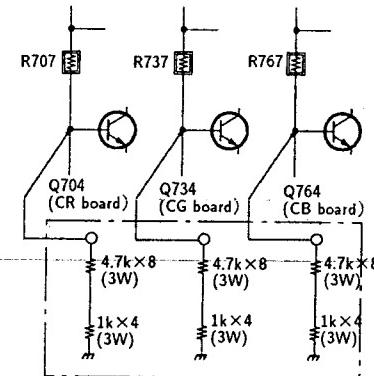
### 3-9. REGISTRATION ADJUSTMENTS

1. Out put red, blue, and green.
2. Out put cross hatch and monoscope signals to check registration. Also check focus.

### 3-10. WHITE BALANCE ADJUSTMENTS

#### 1) Screen adjustment

1. Input white signal.
2. Remove connectors CR-15, CG-16, and CB-17.
3. Fit jigs between the ground and R707, R737, and R767.



※ Resistors in each jig are connected serial.

4. Turn the RGB (red, green, and blue) screen variable resistors in the focus block to make the flyback line faint. Stop before the line completely disappears.
5. Insert connectors CR-15, CG-16, and CB-17.

- 2) White balance adjustments (09, 14, 15, 16, 17)
1. Input monoscope signal and enter service mode.
  2. Select the picture quality adjustment from the menu and set PICTURE minimum. Select the CXA1587S service item.
  3. Use the commander to adjust 09 (SUB BRIGHT) so that 10IRE of the monoscope pattern becomes faintly luminous.
  4. Input white signal.
  5. Set PICTURE minimum. Adjust item 16 (green cut off) and 17 (blue cut off) to obtain an optimum white balance.
  6. Set PICTURE maximum. Adjust 14 (green-drive) and 15 (bluedrive) to obtain an optimum white balance.
  7. Repeat white balance adjustment alternating PICTURE setting at the minimum and maximum.

## SECTION 4

### CIRCUIT ADJUSTMENTS

#### 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-832.

#### HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing any two buttons on the front panel.

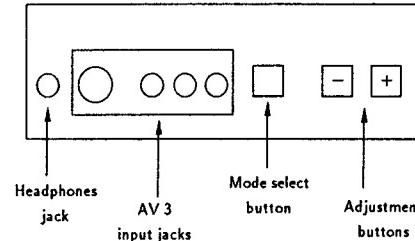


Fig.4-1

2. "TT" will appear on the upper right corner of the screen.

#### Command operation in service mode

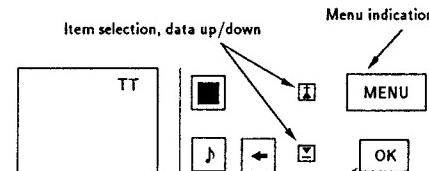


Fig.4-2

Fig.4-3

3. Press the MENU button of the commander to get the menu on screen.

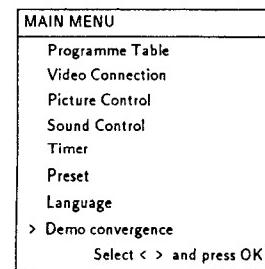


Fig.4-4

4. Press the  and  buttons of the commander and move > to DEMO.
5. Press  OK button to proceed to the next menu.
6. The menu of fig.4-5 will appear on screen. Select DEVICE corresponding to the adjustment item from the table on next page.

DEVICE
Init
> CXA 1587
CXD 2018
TDA 9145
CXA 1526
TDA 6612
CX 7948 A
PIP
Select < > and press OK

Fig.4-5

7. If adjustment item is CXA 1587, press the  button and move > to CXA 1587.

#### CXA 1587

Item No.	Adjustment item	Data Amount
01	PICTURE	53
02	COLOR	31
03	BRIGHT	31
04	HUE	31
05	SHARPNESS	7
06	RGB PICTURE	13
07	SUB CONTRAST	ADJ.
08	SUB COLOR	ADJ.
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.

8. Press  OK button to get the next selection menu.
9. Press  button and move > to the adjustment item and press  OK button.
10. Press the  and  buttons to change the data in order to comply each standard.
11. Press  OK button to write data.
12. Turn off the power to quit service mode when completing the adjustment.

## CXA 1587

Item No.	Adjustment item	Data Amount
01	PICTURE	53
02	COLOR	31
03	BRIGHT	31
04	HUE	31
05	SHARPNESS	7
06	RGB PICTURE	13
07	SUB CONTRAST	ADJ.
08	SUB COLOR	ADJ.
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.
16	G-AUTO CUT OFF	ADJ.
17	B-AUTO CUT OFF	ADJ.
18	R-MANUAL CUT OFF	ADJ.
19	G-MANUAL CUT OFF	ADJ.
20	B-MANUAL CUT OFF	ADJ.
21	GAMMA LEVEL	0
22	DC TRANSFER RATIO	3
23	DINAMIC PICTURE	2
24	Y FILTER ADJ	ADJ.
25	Y DELAY TIME	15
26	Y DELAY SWITCH 1	0
27	Y DELAY SWITCH 2	1
28	SHARPNESS LIMIT	ON
29	ALL BLK	OFF
30	H SHIFT	32
31	DAC TEST	OFF
32	PRE/OVER SHOOT	7
33	SHARPNESS FO	2
34	SUB SHARPNESS	3
35	R MUTE	OFF
36	G MUTE	OFF
37	B MUTE	OFF

## CXA 1526

Item No.	Adjustment item	Data Amount
01	DC SHIFT	32
02	UPPER Y BOW	4
03	LOWER Y BOW	5
04	H.AMP	48
05	H TILT	29
06	UPPER COR BOW	32
07	UPPER TILT	32
08	LOWER COR BOW	32
09	LOWER TILT	32

Typical Value (OSD based)when receiving PAL Philips pattern.

TDA 6612	Adjustment item	Data Amount
	Stereo-Separation	30

Should be adjusted twice 4:3 and 16:9 mode.

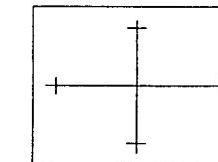
38	AGING 1	OFF
39	AGING 2	OFF
40	AKB	ON
41	INHIBIT RGB	OFF
42	FORCED RGB	OFF
43	V/2 V	OFF
44	AXIS	PAL
45	HUE SW	OFF
46	V EXTENTION	OFF
47	AFC 1	1
48	AFC 2	0
49	AFC	ON
50	REF.POSITION	0

## CX 7948 a

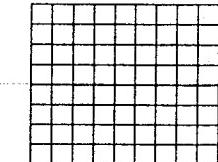
Cross Bar	(off)
Mesh	(off)
Fine Mesh	(off)

Select  $\Delta$   $\nabla$  and press OK.

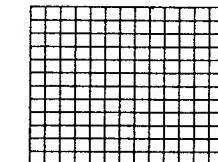
Cross Bar (on)



Mesh (on)



Fine Mesh (on)



## SUB BRIGHTNESS ADJUSTMENT

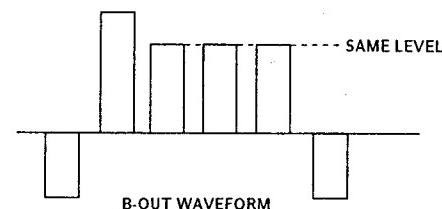
1. Input Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of the grey scale and CUT -OFF 20-IRE glitter slightly.

## SUB CONTRAST ADJUSTMENT

1. Input a video that contains small 100% area on the Black Back ground.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Adjust data so that 2.5 Vp-p can be obtained at ① CN 0123 (R out).

## SUB COLOR ADJUSTMENT

1. Input PAL color bar.
2. Connect an oscilloscope to CN 0125 ① pin (B OUT) on the A board.
3. Enter into service mode and press 22 of CXA 1587, 8 SUB COLOR.
4. Adjust data so that the right sides of the waveform will be the same.



## Y FILTER ADJUSTMENT

1. Input PAL RED pattern.
2. Connect an oscilloscope to CN 0123 ① pin (R OUT) on the A board.
3. Enter into service mode and press 3, 8.
4. Adjust data by  $\Delta$  or  $\nabla$  to minimize the chroma element of CN 0123 ① pin.

## STEREO-SEPARATION ADJUSTMENT

1. Input 1 kHz stereo signal to the L-ch and 400 Hz stereo signal to the R-ch.
2. Enter into service mode and press 19.
3. Adjust data so that sound does not leak to the R-ch and the L-ch.

## DRIVE AND CUT OFF

See direct test mode list attached and refer to sub brightness or such for adjustment method.

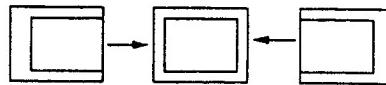
**DEFLECTION SYSTEM ADJUSTMENT**

1. Enter into service mode and select CXD 2018.
2. Select and adjust each item in order to get an optimum image.

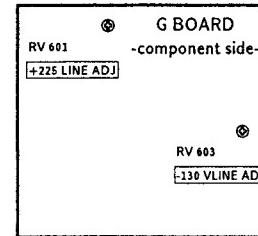
CXD 2018

Item No.	Adjustment item	Data Amount
01	V SIZE	No ADJ.
02	V SHIFT	No ADJ.
03	S CORRECTION	No ADJ.
04	V LINEARITY	No ADJ.
05	H SIZE	No ADJ.
06	PIN AMP	No ADJ.
07	TILT	No ADJ.
08	UPPER CORNER	No ADJ.
09	LOWER CORNER	No ADJ.
10	V BOW	No ADJ.
11	ANGLE	No ADJ.
12	HV COMP.V	13
13	HV COMP.H	8
14	FRAME SHIFT	OFF
15	FREE RUN 60 Hz	OFF
16	SYSTEM 60 Hz	OFF
17	ASPECT WIDE	OFF
18	DOUBLE SCAN	OFF
19	NON INTERLACE	ON
20	H SHIFT	32
21	N/S CORRECTION	No ADJ.

H SHIFT

3. Press **OK** button to write the data.

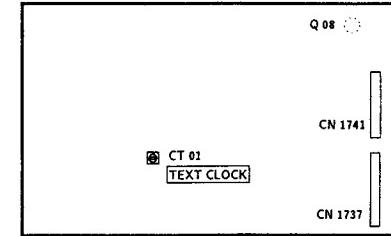
If menu display may disturb the adjustment press **OK** to clear, to resume it, press **OK** again.

**4-2. G BOARD ADJUSTMENTS****+225 V LINE ADJUSTMENT (RV 601)**

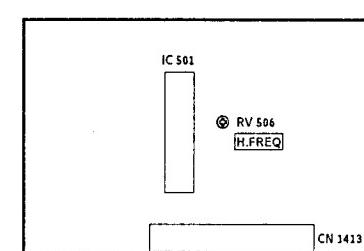
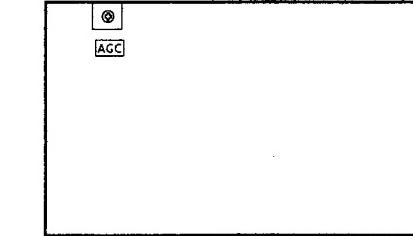
1. Input the color-bar signal.
2. Connect a digital multimeter to emitter of Q 604.
3. Adjust RV 601 so that voltage is  $+225 \text{ V} \pm 0.5 \text{ V}$ .

**-130 V LINE ADJUSTMENT (RV 603)**

1. Input the color-bar signal.
2. Connect a digital multimeter to emitter of Q 612.
3. Adjust RV 603 so that voltage is  $-130 \text{ V} \pm 0.1 \text{ V}$ .

**4-4. V BOARD ADJUSTMENT****TEXT CLOCK ADJUSTMENT (CT 01)**

1. Get TEXT MENU on screen.
2. Connect GND and the base of Q 08 on V board.
3. Adjust CT 01 on V board so that the MENU stands still as much as possible.

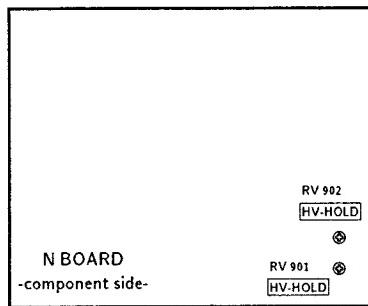
**4-5. IF ADJUSTMENT****4-3. M BOARD ADJUSTMENT****AGC ADJUSTMENT (IF BLOCK)**

1. Receive off-air signal.
2. Adjust AGC VR so that there is no snow noise and cross-modulation.
3. Change receiving channel and confirm status.

**H.FREQ ADJUSTMENT (RV 506)**

1. Connect GND to **②** pin of IC 501 on M board.
2. Connect a frequency counter to **④** pin of IC 501.
3. Adjust RV 506 on M board to  $15,625 \pm 100 \text{ Hz}$ .
4. Remove **②** pin of IC 501 from GND.

## 4-6. N BOARD ADJUSTMENTS

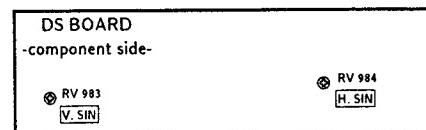
**HV-HOLD DOWN ADJUSTMENT**

1. Connect the HV meter.
2. Receive dot pattern.
3. Adjust HV to  $33.5 \pm 0.1$  KV by RV 901.
4. Slowly turn the RV 902 till HV-HOLD DOWN work.
5. RV 902 fixed with RTV.

**HV-REGULATOR ADJUSTMENT**

1. Connect the HV meter.
2. Receive dot pattern.
3. Adjust HV to  $31.5 \pm 0.1$  KV by RV 901.
4. RV 901 fixed with RTV.

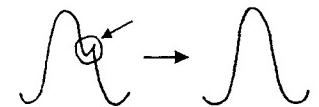
## 4-7. DS BOARD ADJUSTMENTS

**H. SIN ADJUSTMENT**

1. Connect an oscilloscope to pin ① of IC 1712 on DS board.
2. Adjust H. SIN by RV984.

**V. SIN ADJUSTMENT**

1. Connect an oscilloscope to pin ⑦ of IC 1712.
2. Adjust V. SIN by RV983.



Model name	KP-S 4613
Item	
Pal Comb	ON
PiP	ON
RGB Priority	ON
Woofer Box	OFF
Scart 1	ON
Scart 2	ON
Front in (3)	ON
Scart 4	ON
Dyn. Convergence	OFF
Projector	ON
A × B in 16 : 9 mode	ON
Norm B/G	ON
Norm I	ON
Norm D/K	ON
Norm AUS	OFF
Norm L	ON
Norm SAT	OFF
Norm M	OFF
Language Preset	English

**4-8. TEST MODE 2 :**

Is available by pressing Test button two times, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press two times 0, or switch TV in Standby Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Aging Condition (Volumin., Picture max., Brightness max., Aging 2 Mode of CXA 1587, TDA 2595 is locked to CXA 1587 via PIN 34 of μ-Con.)
08	Shipping Condition (Analog Values are RESET due to factory setting. Prog 1 is selected, TT Mode is switched off)
09	dummy
10	Tenth entry is deleted
11	Balance
12	Hue
13-14	dummy
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM
17	Preset Level for AV Sources
18	dummy
19	Stereo Separation
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24-29	dummy

30	Tenth entry is deleted
31	Green Drive
32	Blue Drive
33	Green Cut Off (Auto Cut Off)
34	Blue Cut Off (Auto Cut Off)
35	Red Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
36	Green Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
37	Blue Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
38	Y-Filter adjustment (Trap is switched off and TDA 9145 is switched in forced NTSC Mode)
39	dummy
40	Tenth entry is deleted
41	Default setting of CXA 1587 (Only in Plog 99 available)
42	Default setting of CXA 2018 (Only in Plog 99 available)
43	Default setting of CXA 1526 (Only in Plog 99 available)
44	(all Port High) Not yet
45	(all Port High) Not yet
46-48	dummy
49	Erase the NVM Testbyte (this byte detects already stored NMV's) After selecting this function, switch TV Off and On → the NVM will be preset by μ-Controller. (Not the channel data)

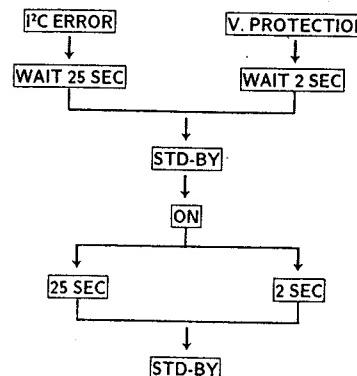
Note: For No. 35, 36, 37 and 38 special pressing (AKB, forced Color Mode, Trap) is selected.  
After selecting a new Test Mode Number, the AKB is switched ON, the Trap is switched On and TDA 9145 is switched to Auto Search Mode.

In Test Mode 2 the Menu display is switchable by Speaker-Off button.

**4-9. ERROR MESSAGE**

Self diagnosis system operates as follows.

- When MP can't get the acknowledge back from the device, LED starts flashing according to the table as attached.



In case of more errors in parallel, the blinking error shows max. Priority according to the error number (e.g. error 2 and error 5 appears together, then LEDs shows error 2).

TABLE OF ERRORS

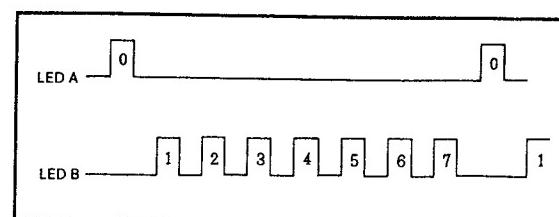
ERROR COUNT	IC TYPE	FUNCTION
1	I²C BUS	SDA low
2	X 24 C 16	EEPROM
3	SDA 3202	Tuner PLL
4	TDA 9145	Colour decoder
5	CXA 1587	RGB/Jungle
6	TDA 6612	Sound processor
7	CXD 2018	V deflection
8	CXA 1545	AV switch
11	SDA 5248	Text
13		V protection

Stand by LED  
blinking  
No IR return

**4-10. ERROR I²C BUS DIAGNOSIS SYSTEM**

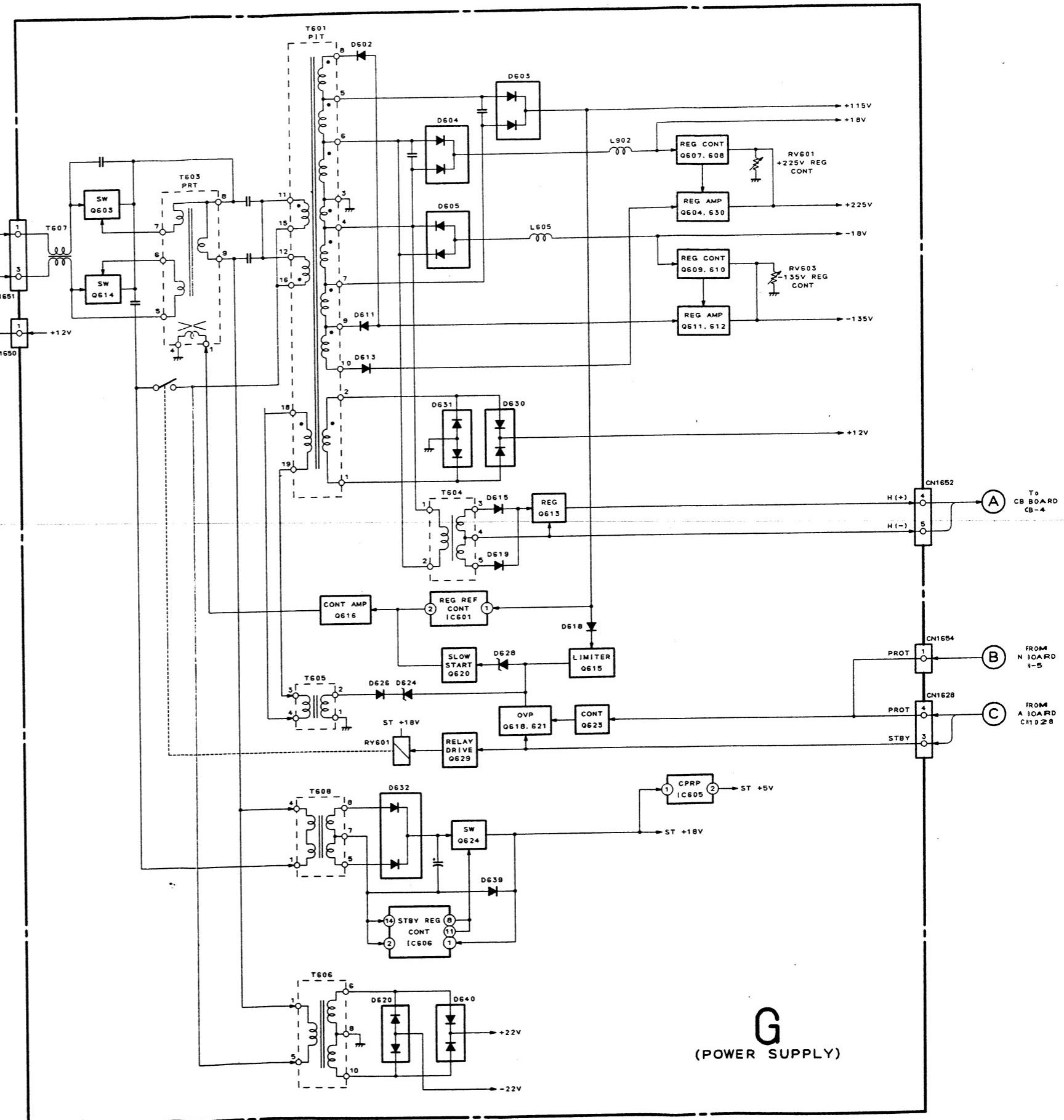
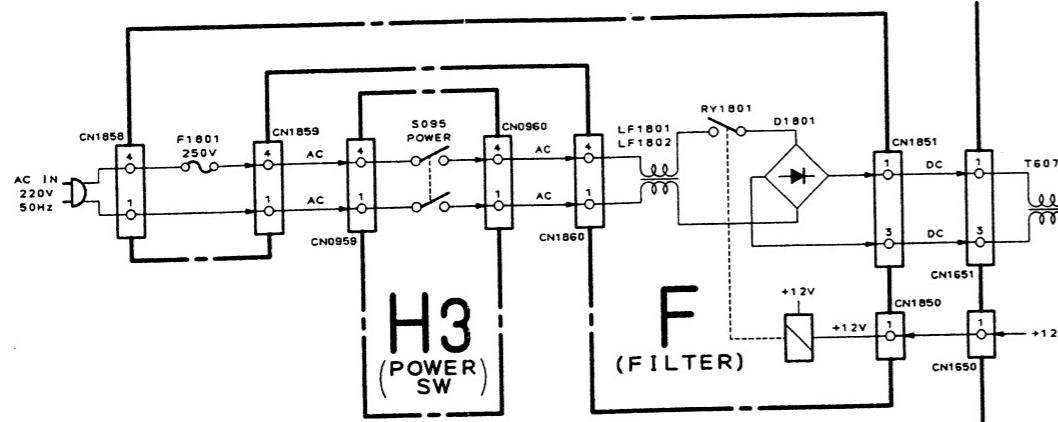
For all ICs in AE 2 chassis which are necessary to get picture and sound there is a built in error I²C Bus diagnosis system.

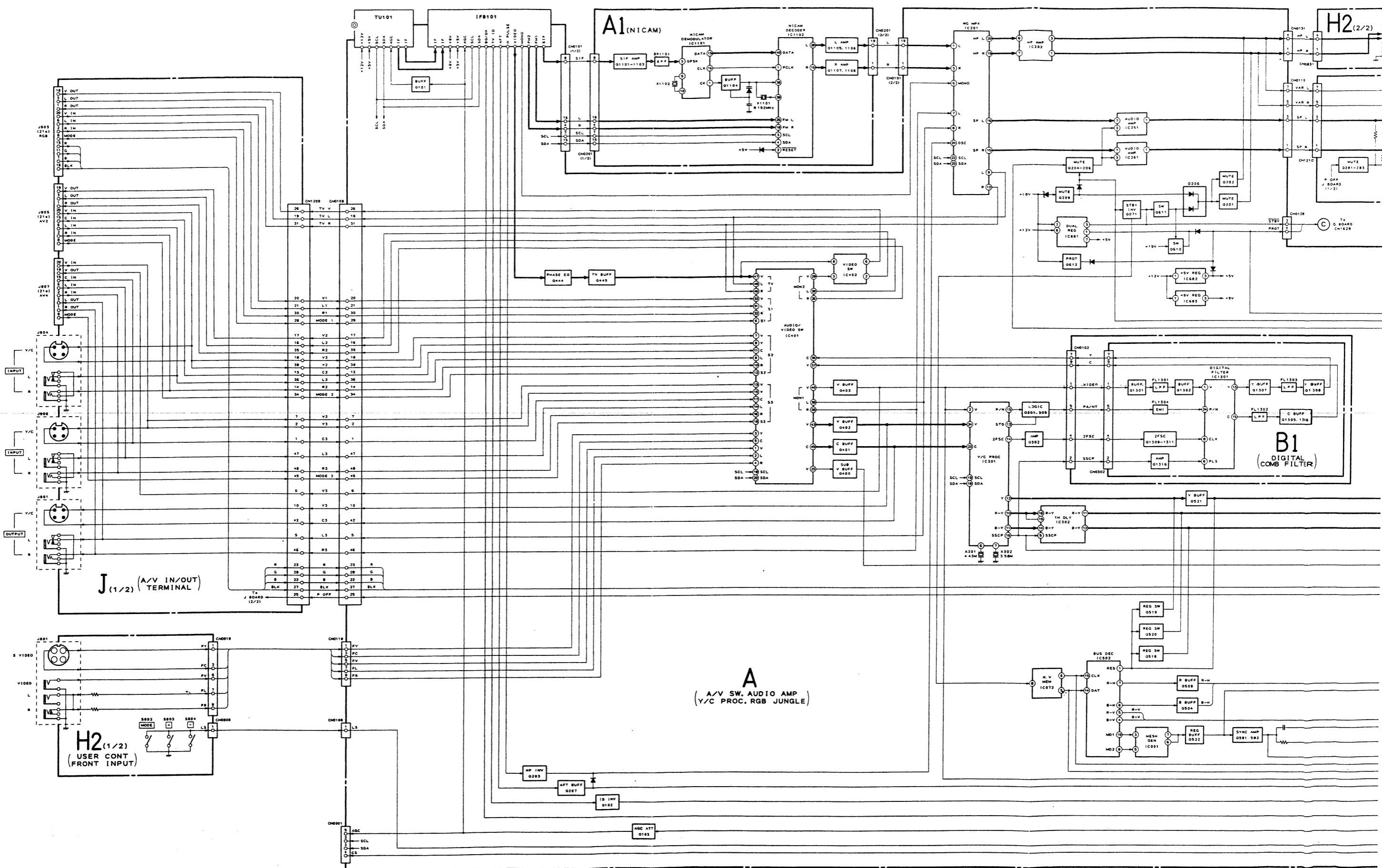
In case of no acknowledge bit, LED A and LED B starts blinking as shown.



## SECTION 5 DIAGRAMS

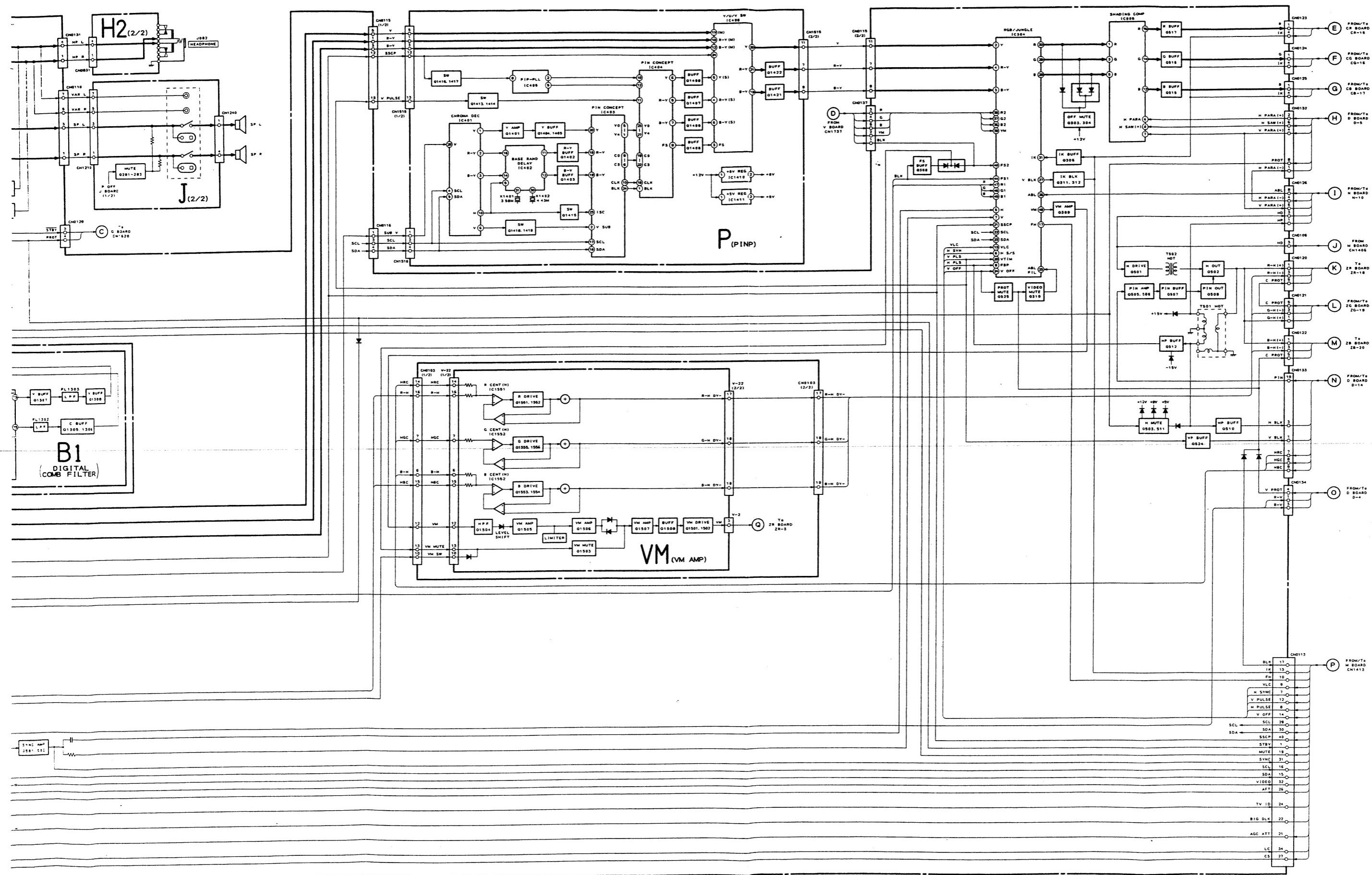
### 5-1. BLOCK DIAGRAMS

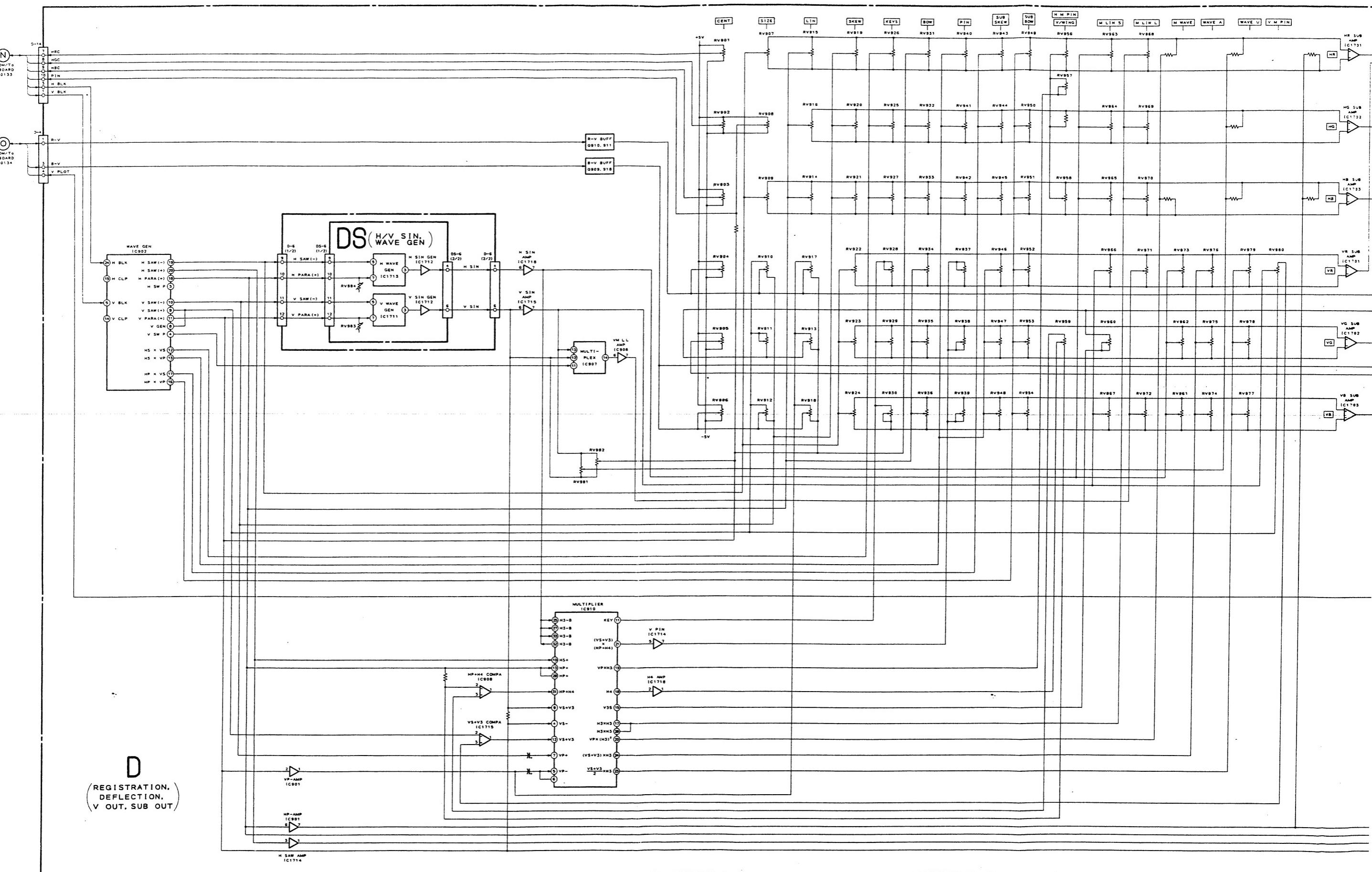


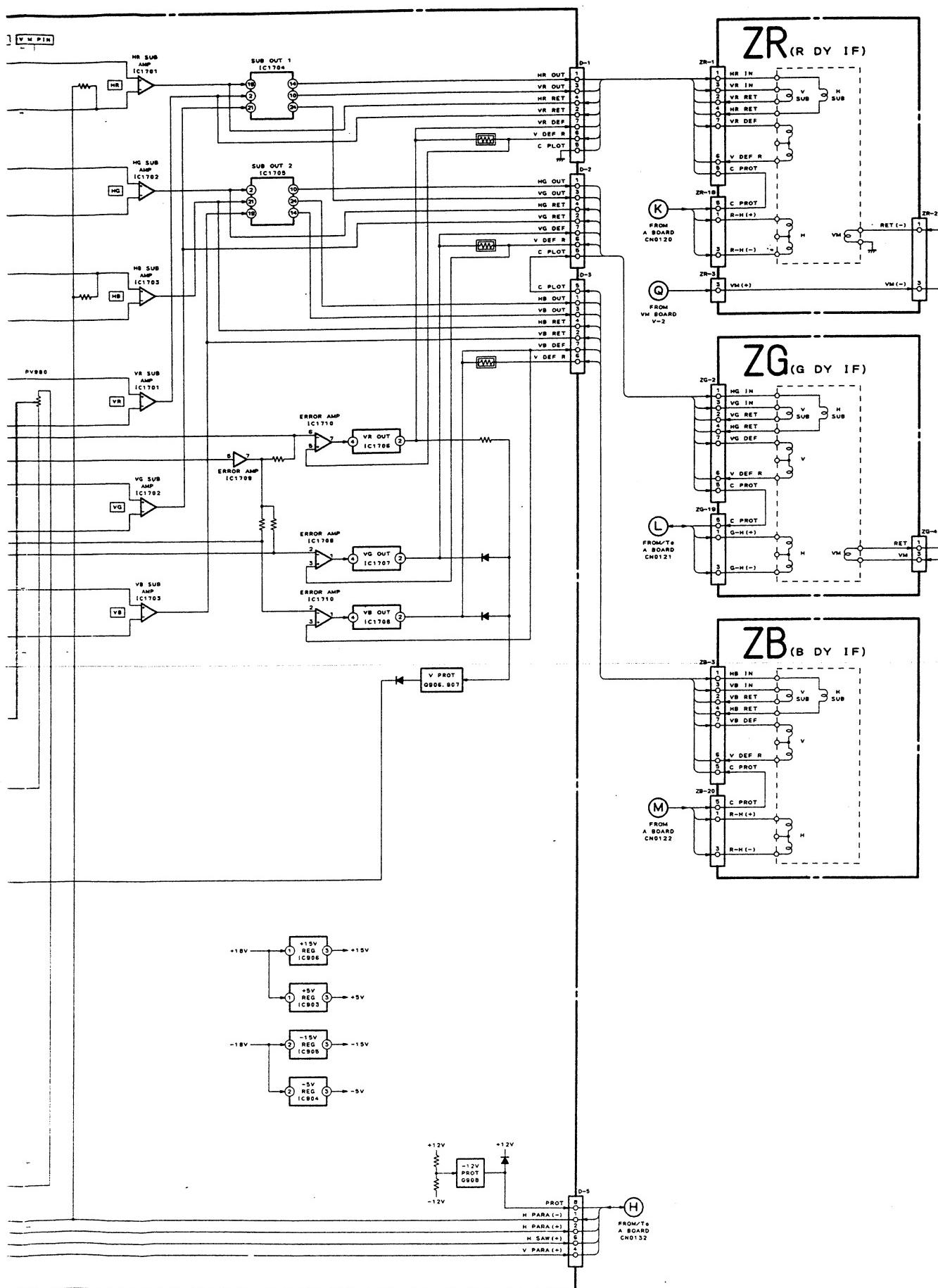


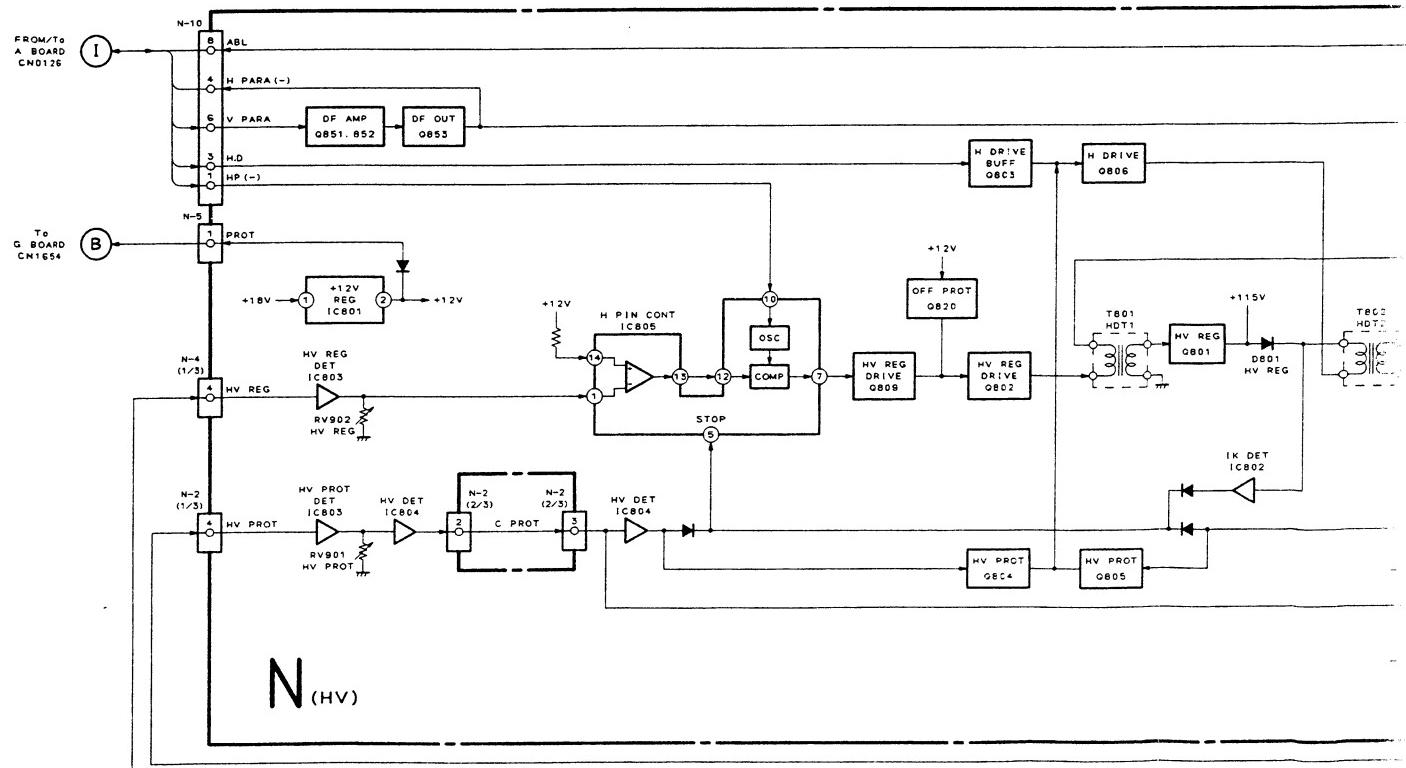
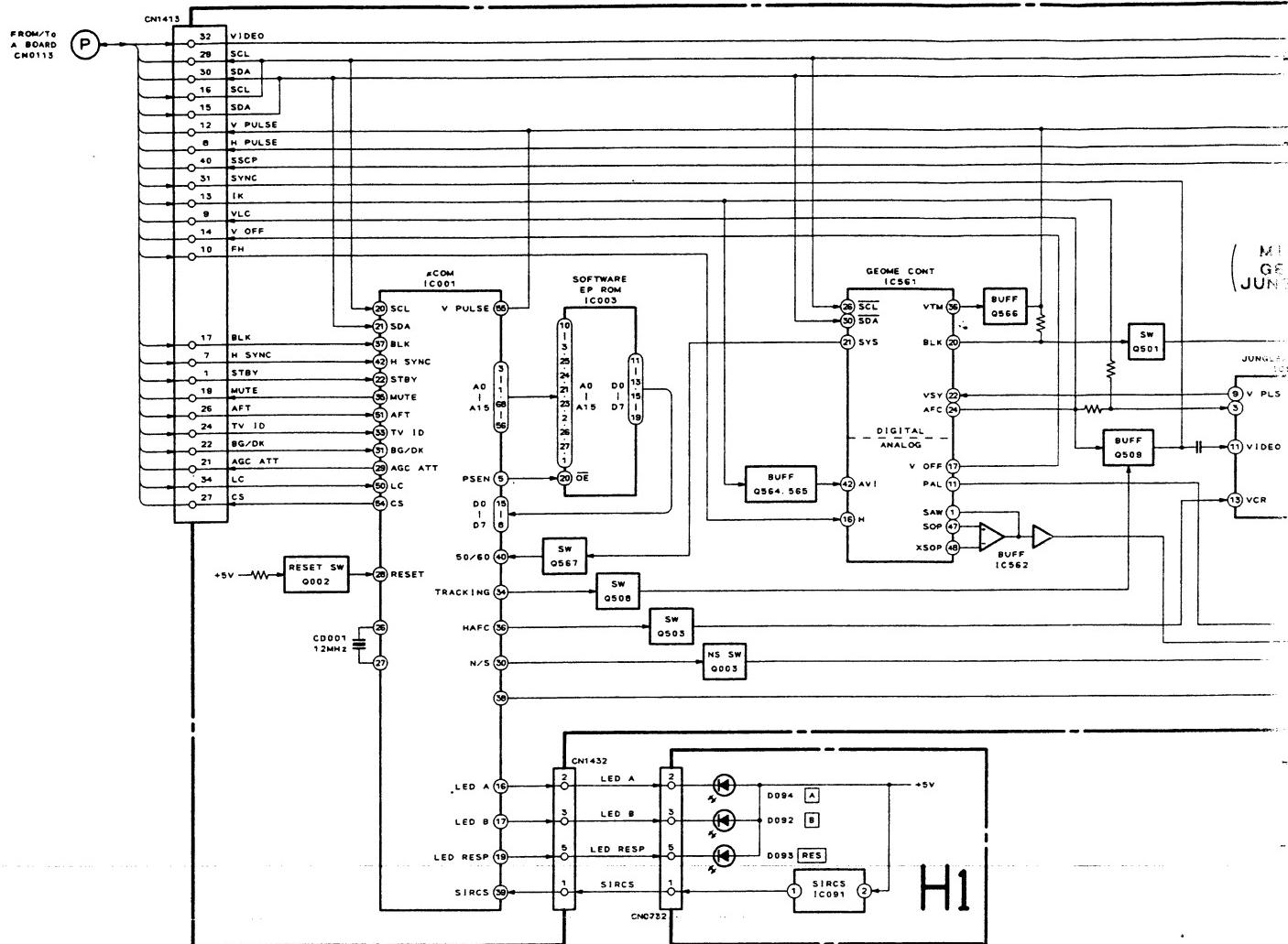
**KP-S4613**  
**RM-832**

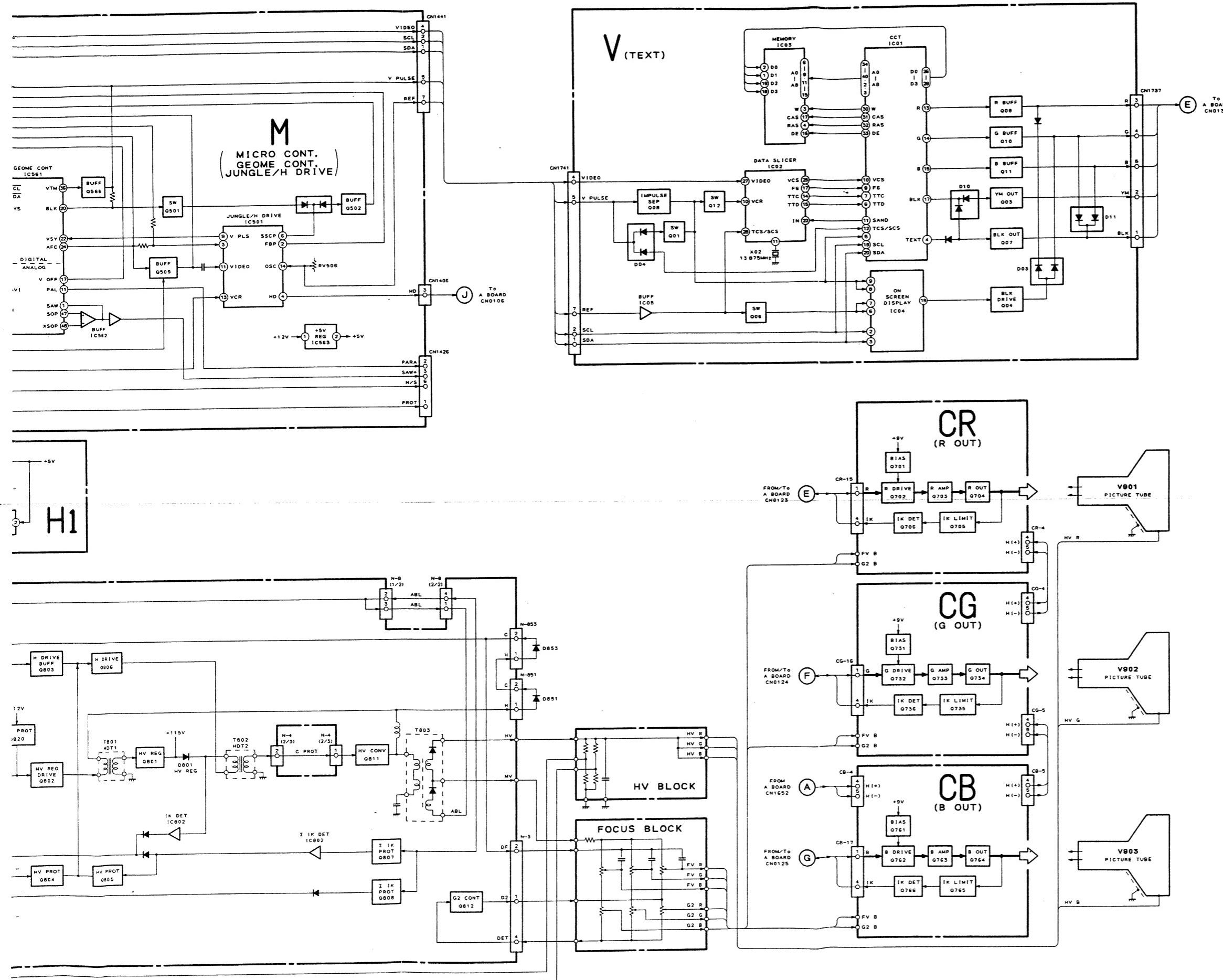
**KP-S4613**  
**RM-832**



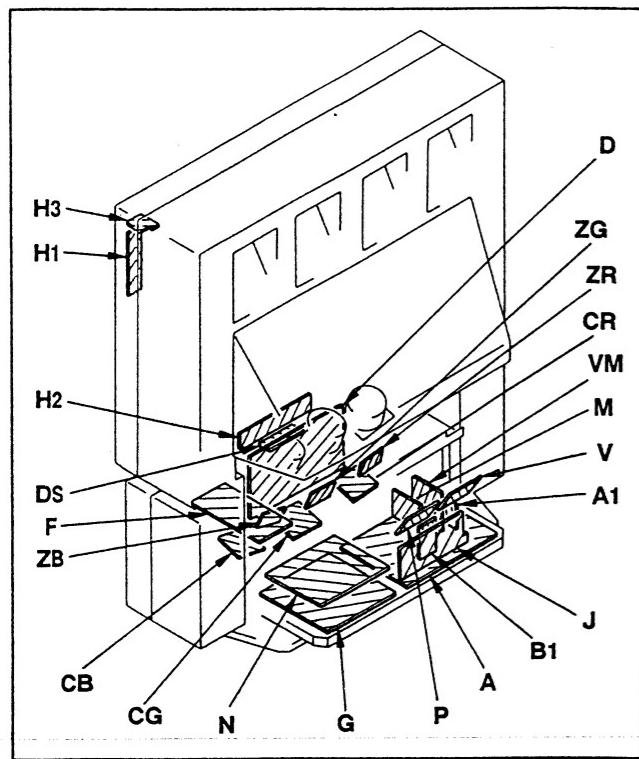








## 5-2. CIRCUIT BOARDS LOCATION



## 5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

## Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\mu\text{F}$   
50 WV or less are not indicated except for electrolytic and tantalums.
  - All resistors are in ohms.  
 $\text{k}\Omega = 1000 \Omega$ ,  $\text{M}\Omega = 1000\text{K}\Omega$
  - Indication of resistance, which does not have one for rating electrical power, is as follows.
- Pitch: 5 mm  
Rating electrical power  $1/4 \text{ W}$
- : nonflammable resistor.
  - : internal component.
  - : panel designation, or adjustment for repair.
  - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
  - Readings are taken with a color-bar signal input.  
no mark : PAL  
( ) : SECAM  
< > : NTSC 3.58  
( ) : NTSC 4.43
  - Readings are taken with a  $10\text{M}\Omega$  digital multimeter.
  - Voltage are dc with respect to ground unless otherwise noted.
  - Voltage variations may be noted due to normal production tolerances.
  - All voltages are in V.
  - \* : Can not be measured.
  - Circled numbers are waveform references.
  - : B+ bus.
  - : B- bus.
  - : signal path.

## Reference information

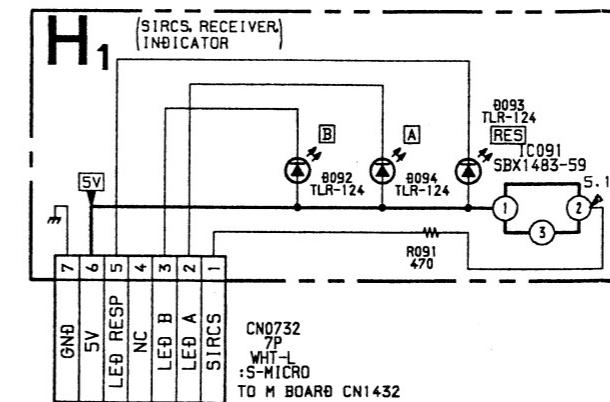
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

## (1) Schematic Diagrams of H1, H2, H3 and F Boards

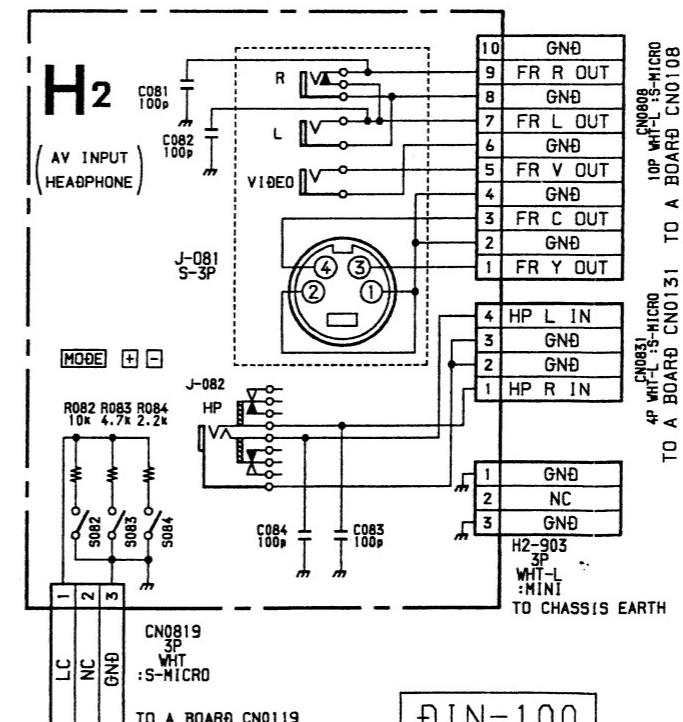
1 2 3 4 5 6 7 8

A



B-SS342.&lt;ET.&gt;-H1.

E



DIN-100

B-SS342.&lt;ET.&gt;-H2.

J

AC IN  
220-240V  
50HZ

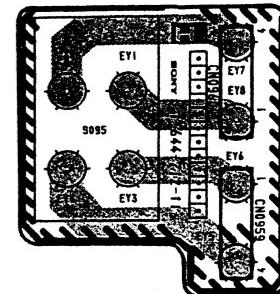
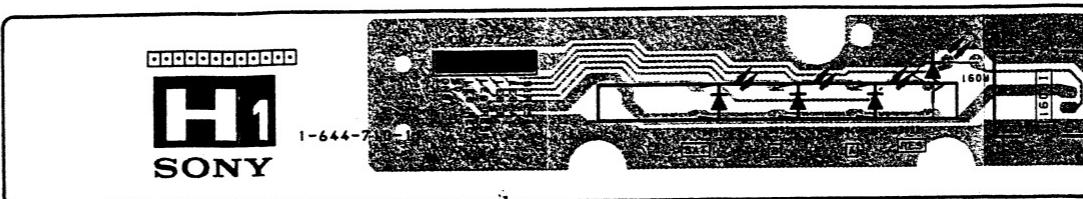
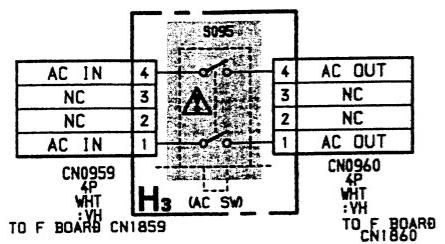
9 | 10 | 11 | 12 | 13 | 14 | 15

**H1** SIRCS, RECEIVER,  
INDICATOR

**H2** [ AV INPUT  
HEADPHONE ]

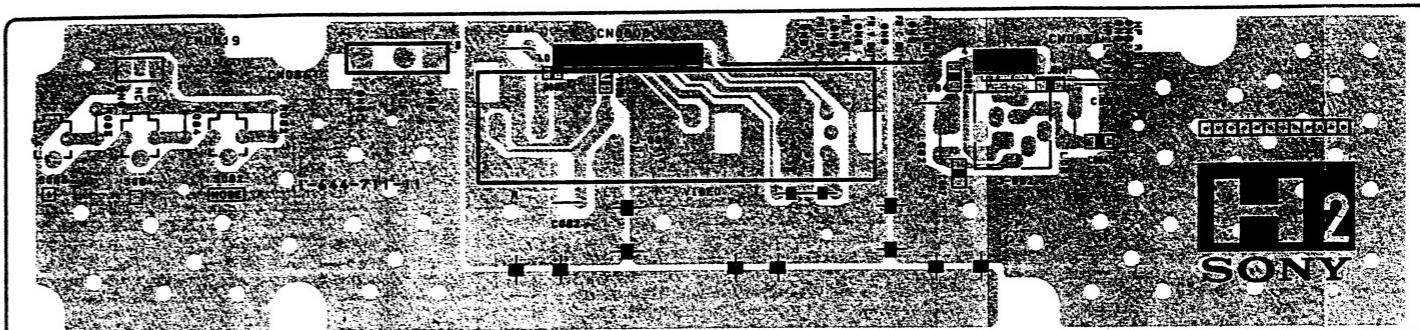
H3 [AC SW] F [AC IN]

- H1 Board -

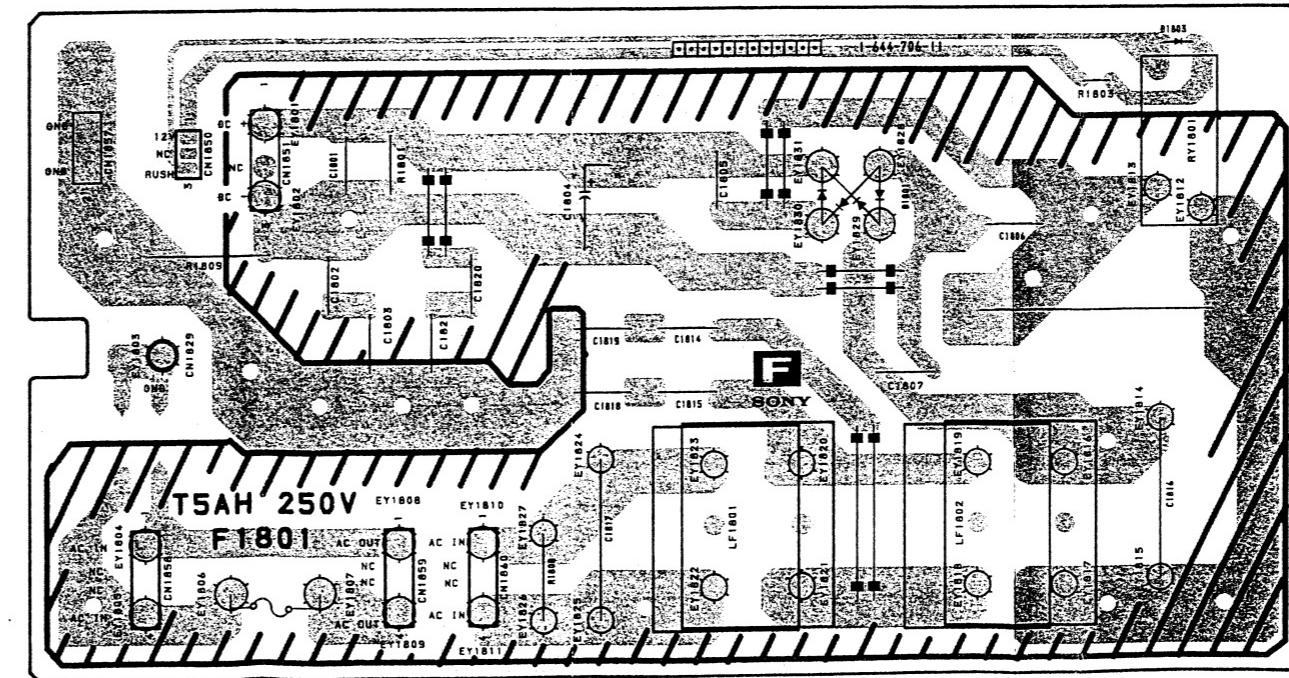
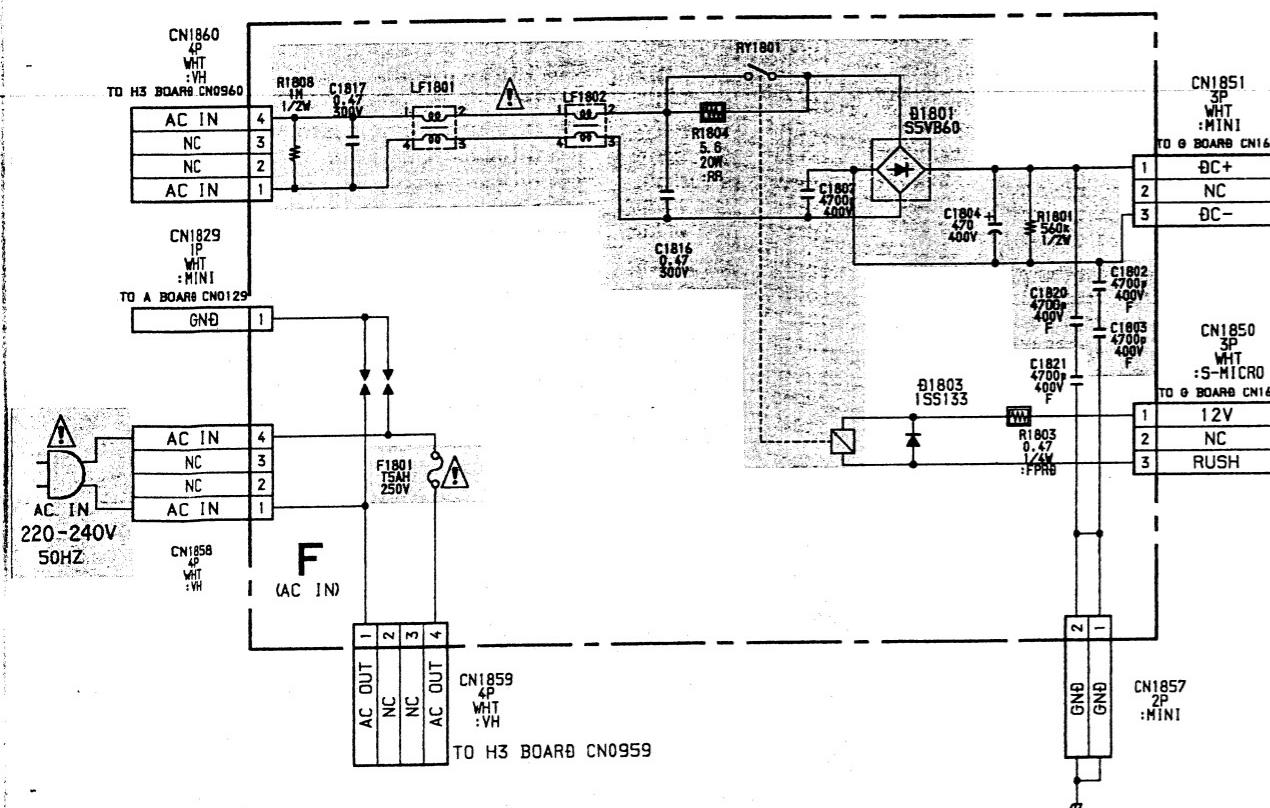


- H3 Board -

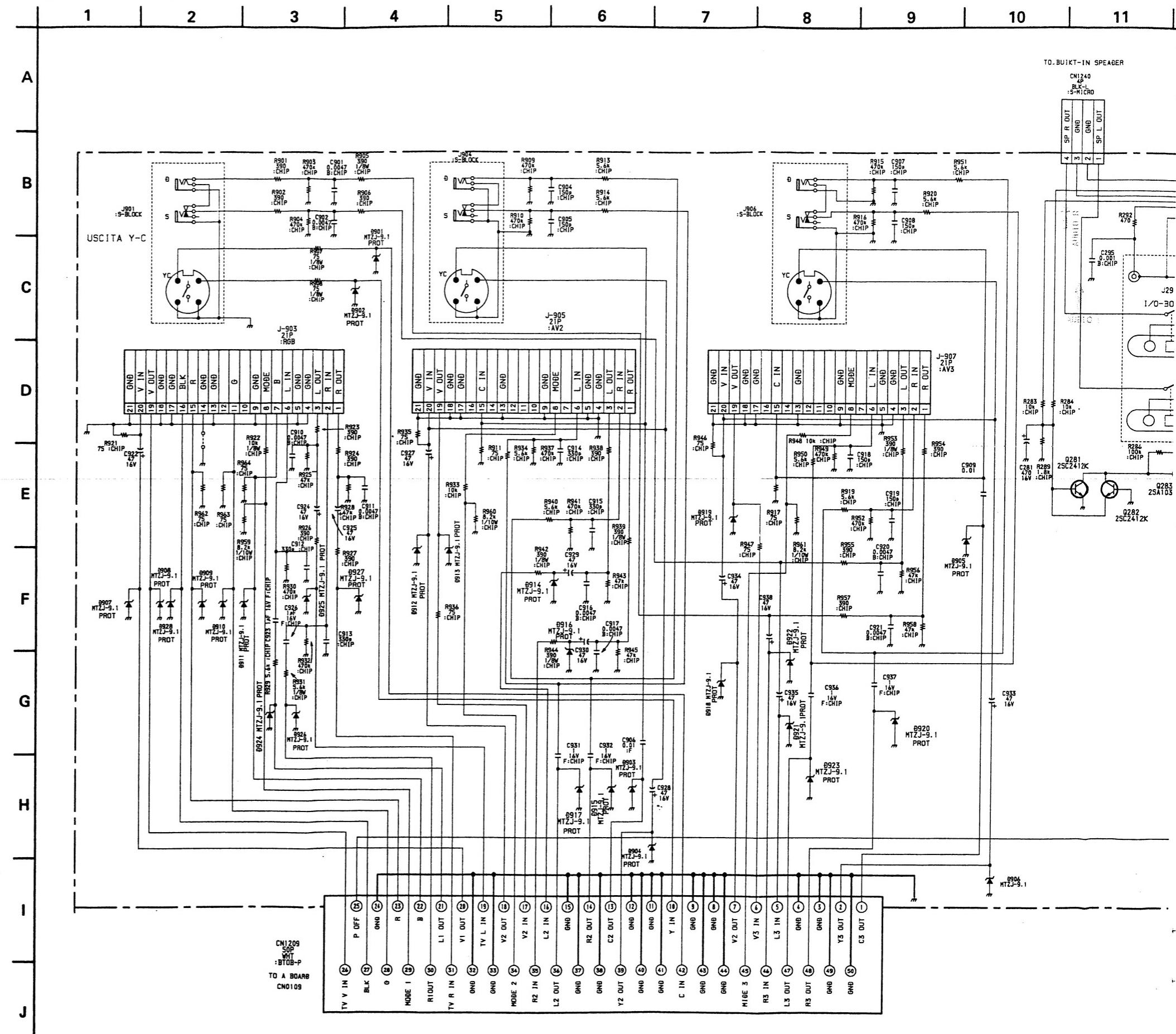
- H2 Board -

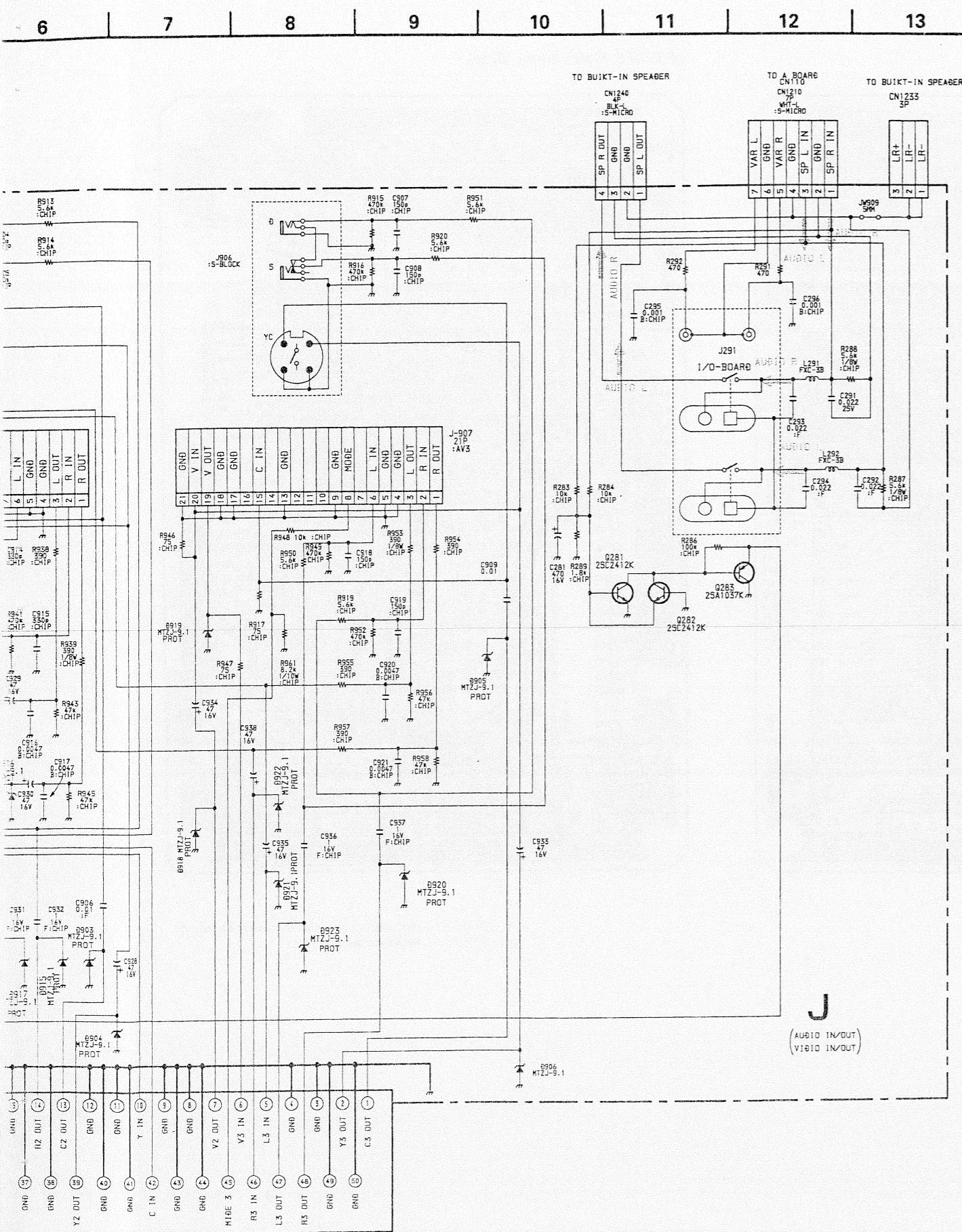


- E Board -

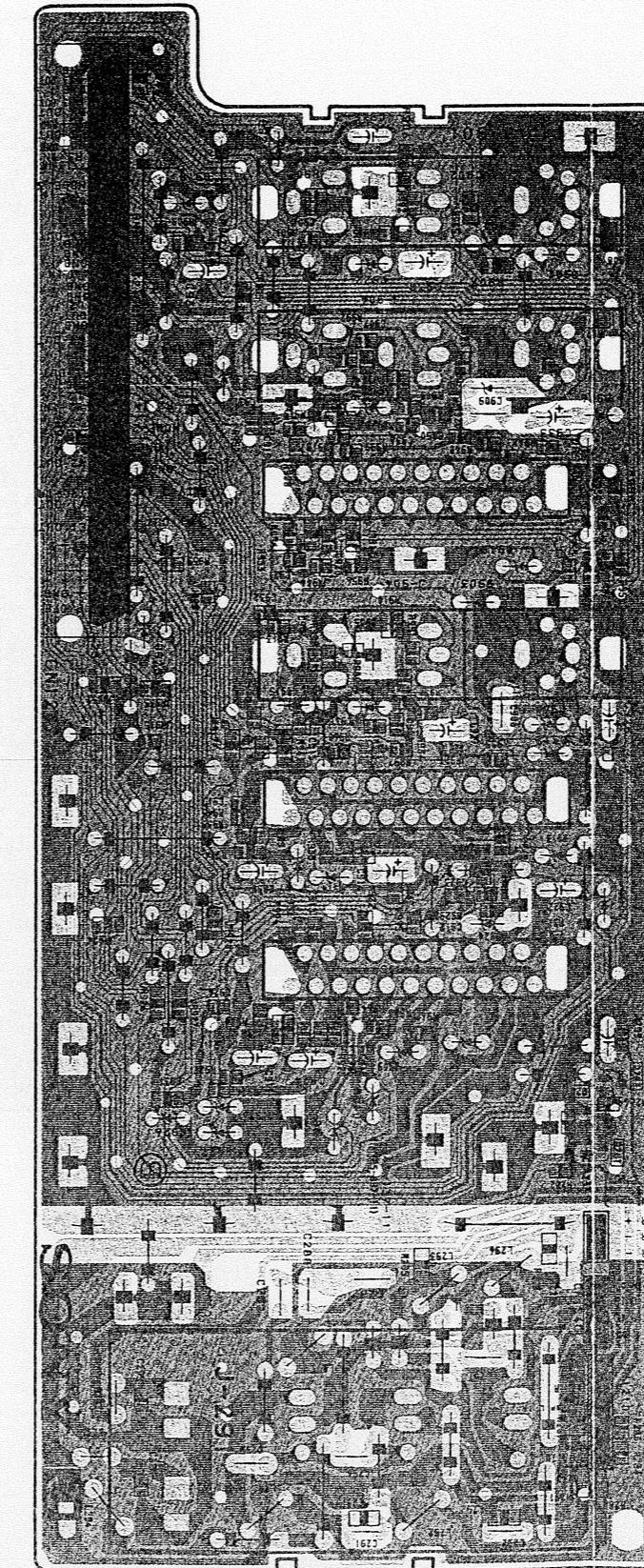


## (2) Schematic Diagram of J Board





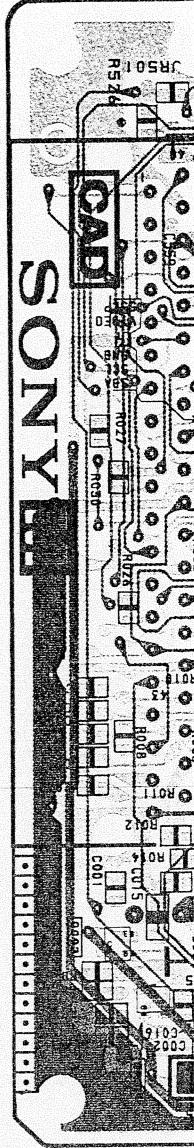
- J Board -



• : Pattern from the side which enables seeing.  
• : Pattern of the rear side.

**J** [AUDIO IN/OUT  
VIDEO IN/OUT]      **M** [MICRO CONTROLLER,  
GEOMETRIC CONTROLLER,  
JUNGLE, H-DRIVE]

- M Board (Con)



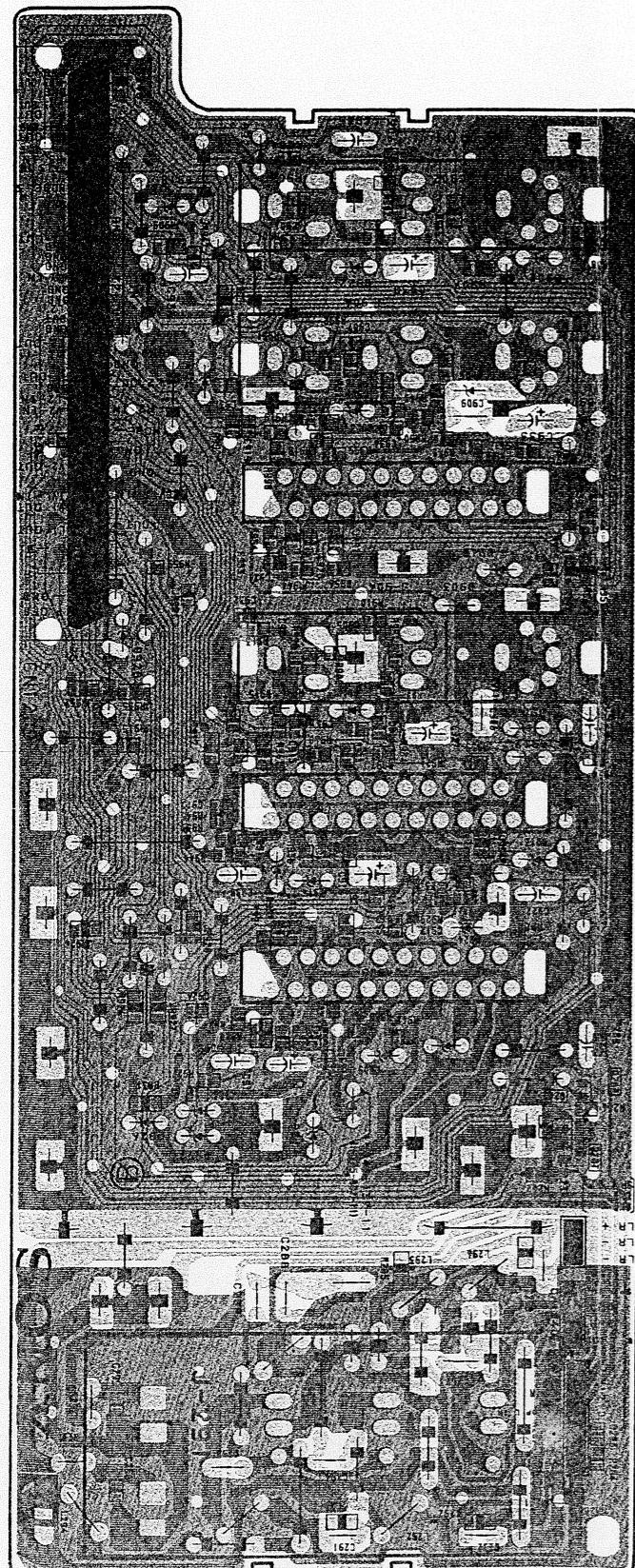
KP-S4613  
RM-832

KP-S4613  
RM-832

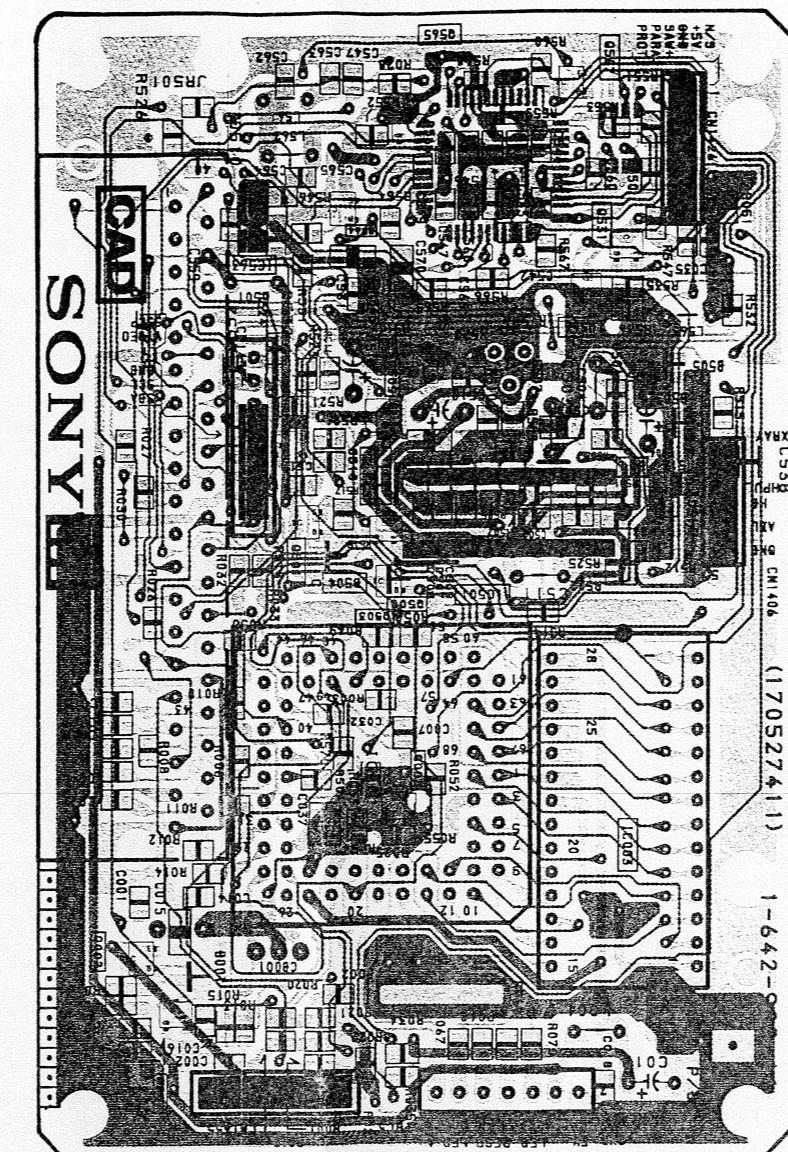
J [AUDIO IN/OUT]  
[VIDEO IN/OUT]

M [MICRO CONTROLLER,  
GEOMETRIC CONTROLLER,  
JUNGLE, H-DRIVE]

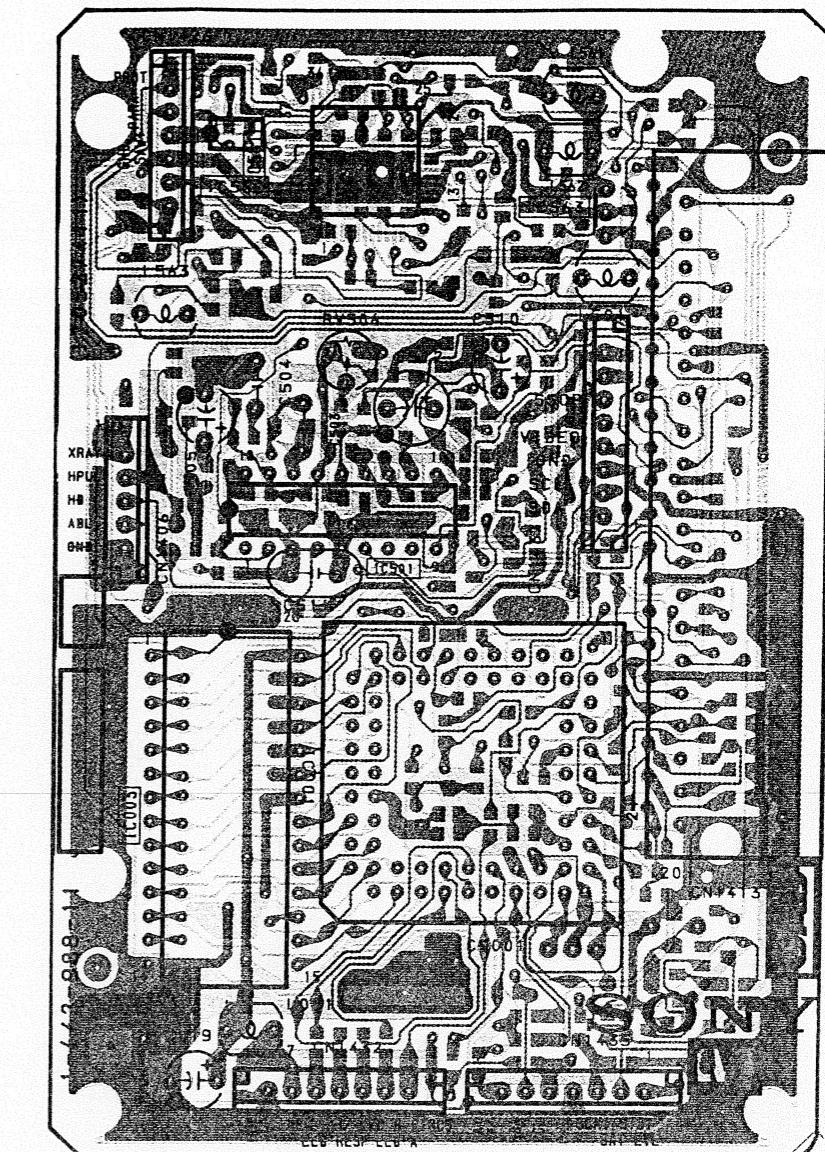
- J Board -



- M Board (Conductor Side) -



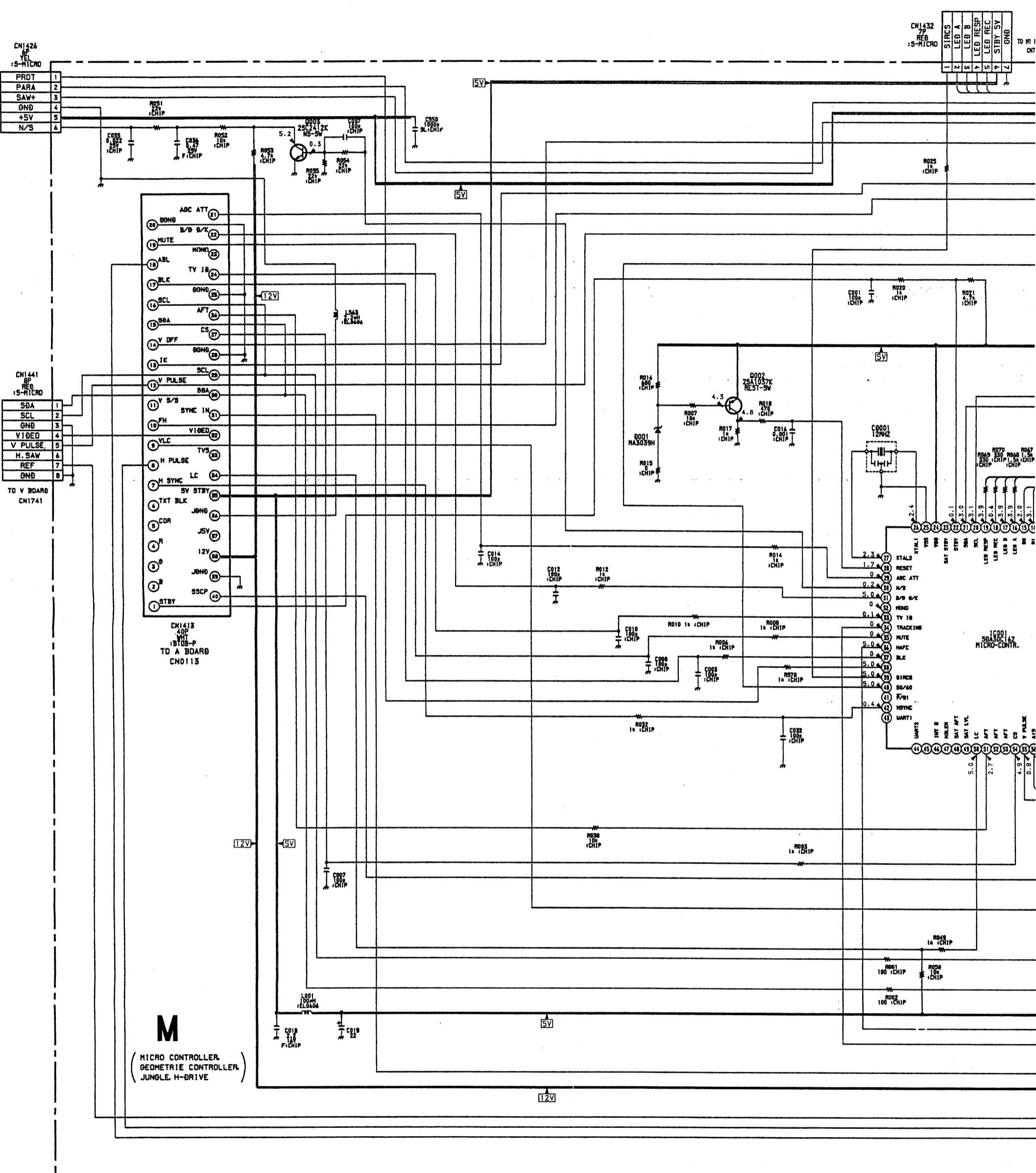
- M Board (Component Side) -

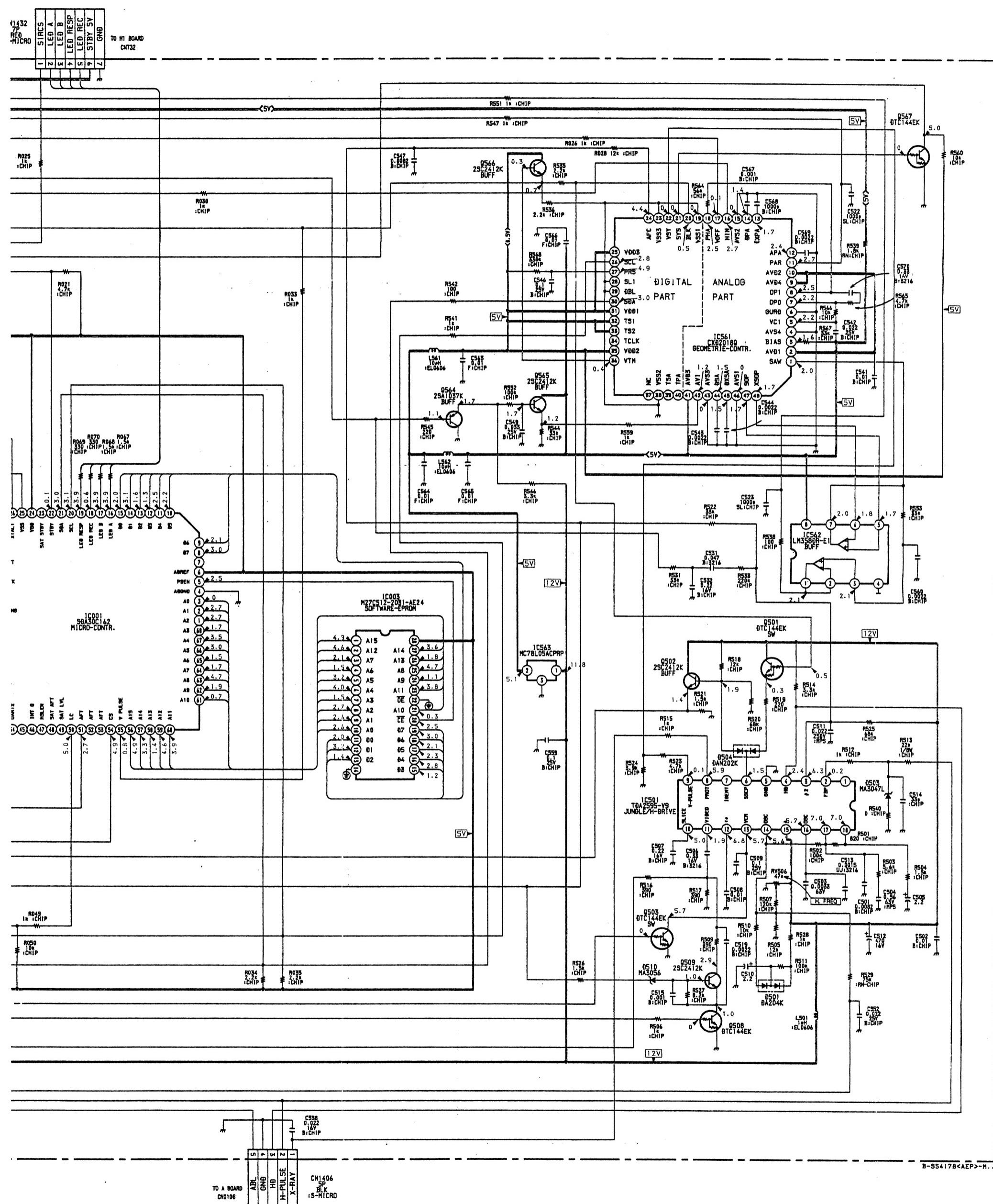


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

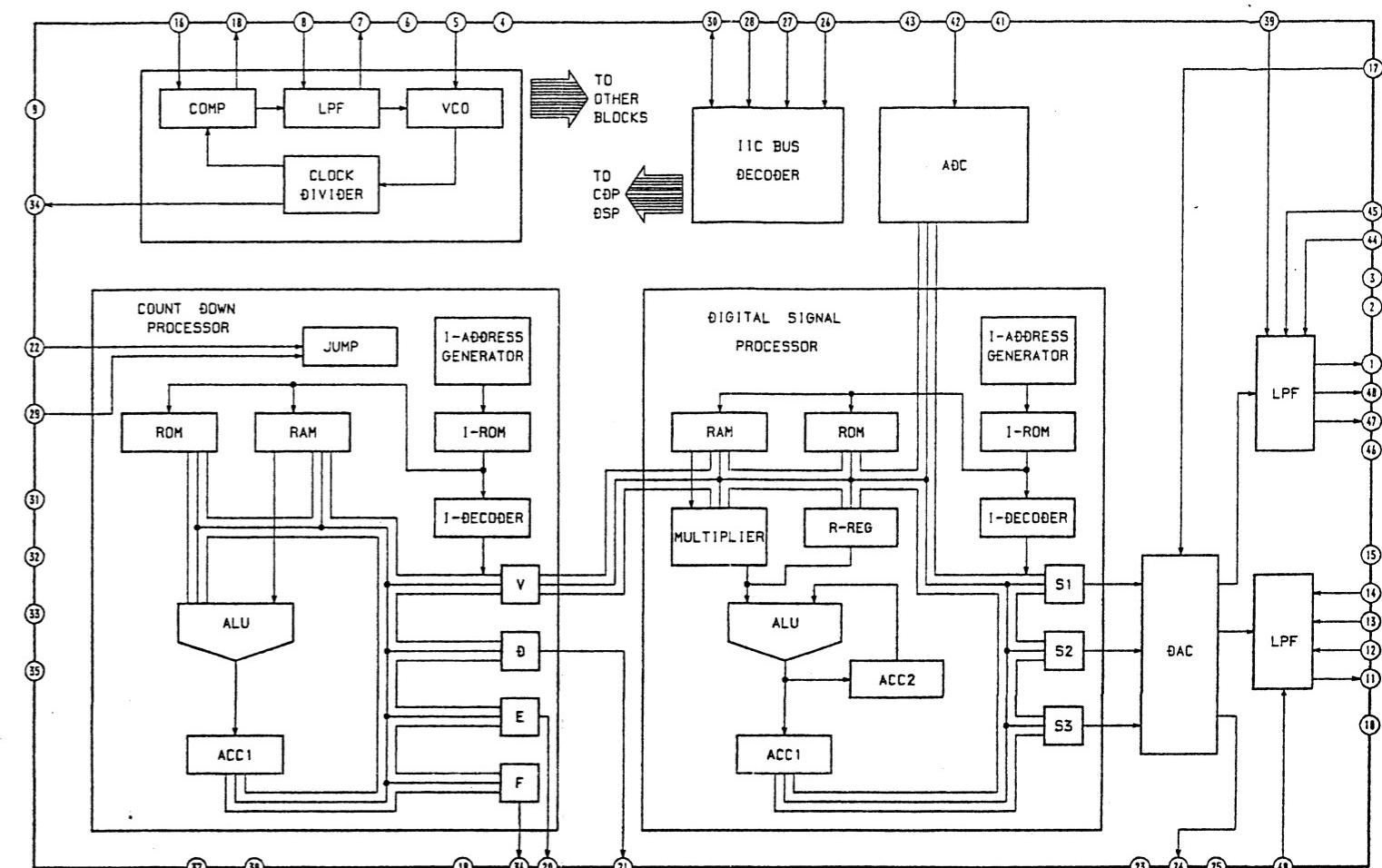
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

### (3) Schematic Diagram of M Board



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

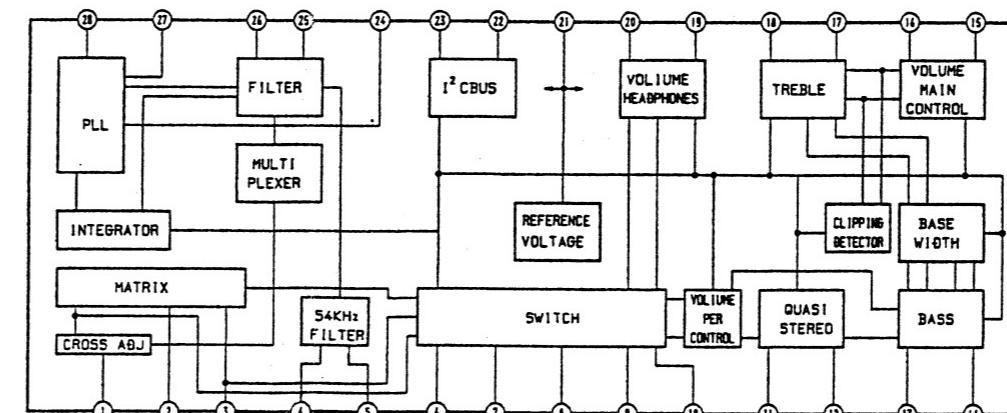
M Board IC561 CXD2018Q



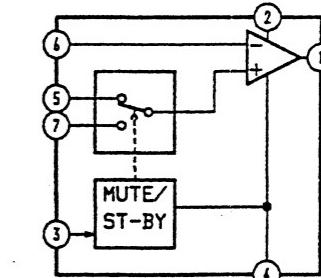
- 64 -

- 65 -

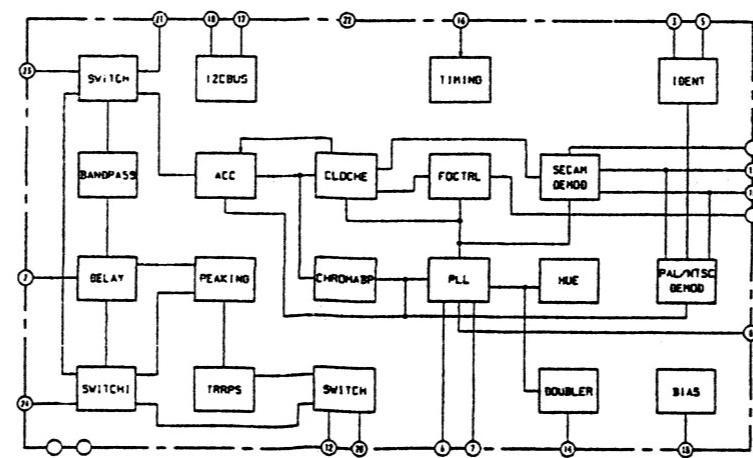
A Board IC201 TDA6612



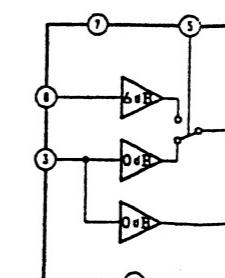
A Board IC251/261 TDA2052



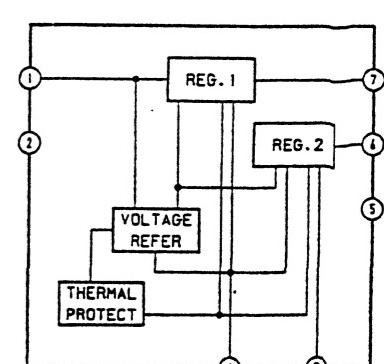
A Board IC301 TDA9145



A Board IC402 TEA2114

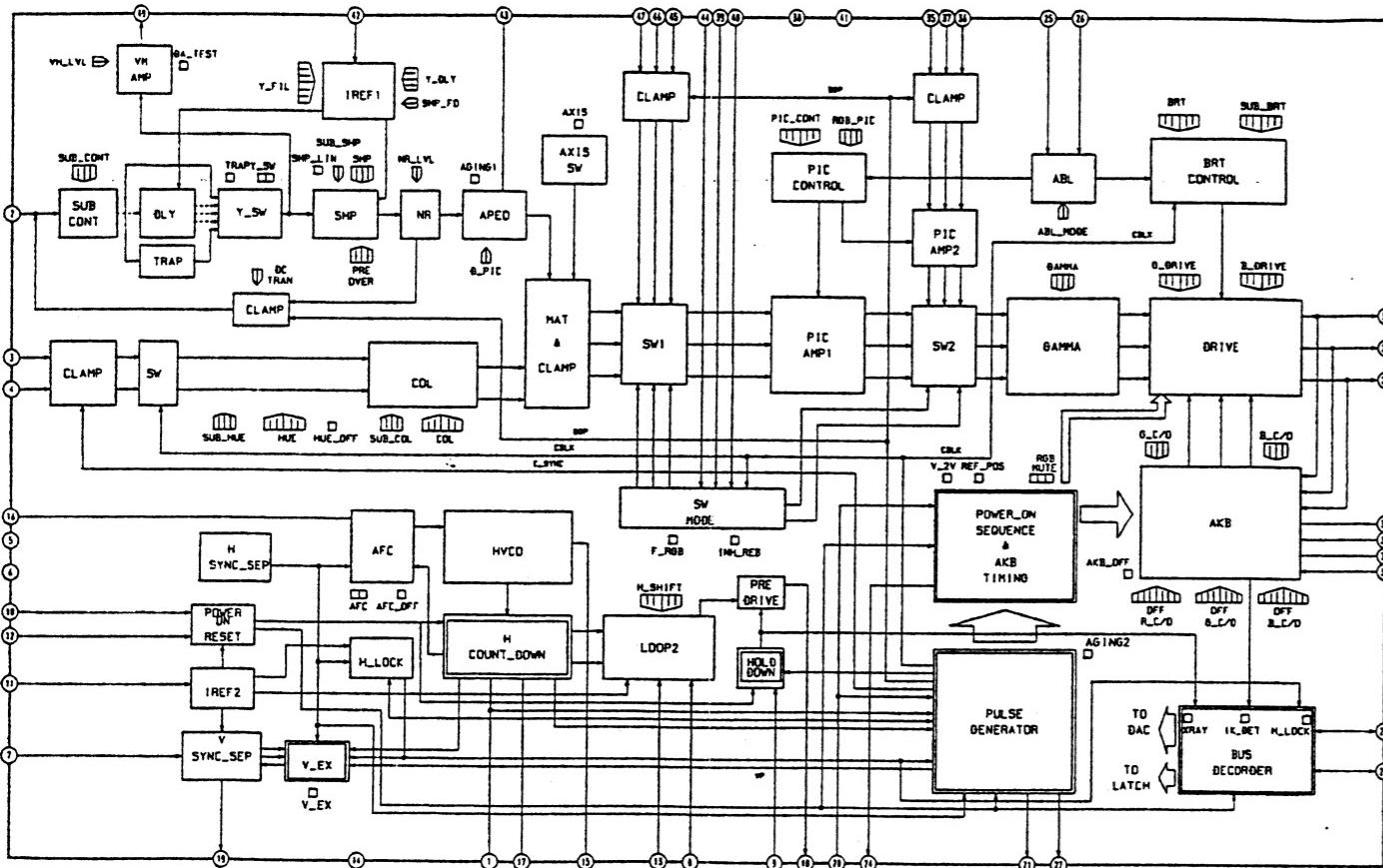


A Board IC681 TDA8138A

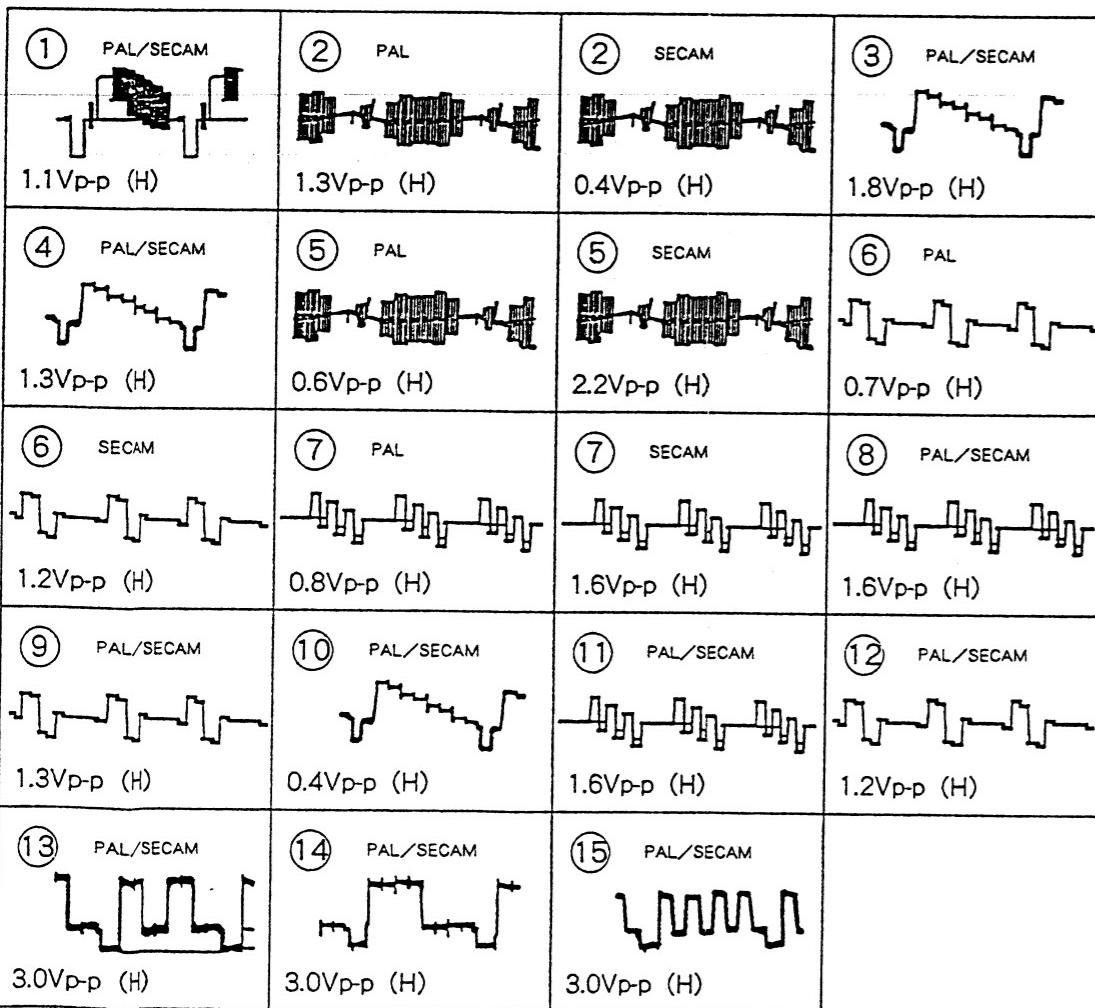


66A

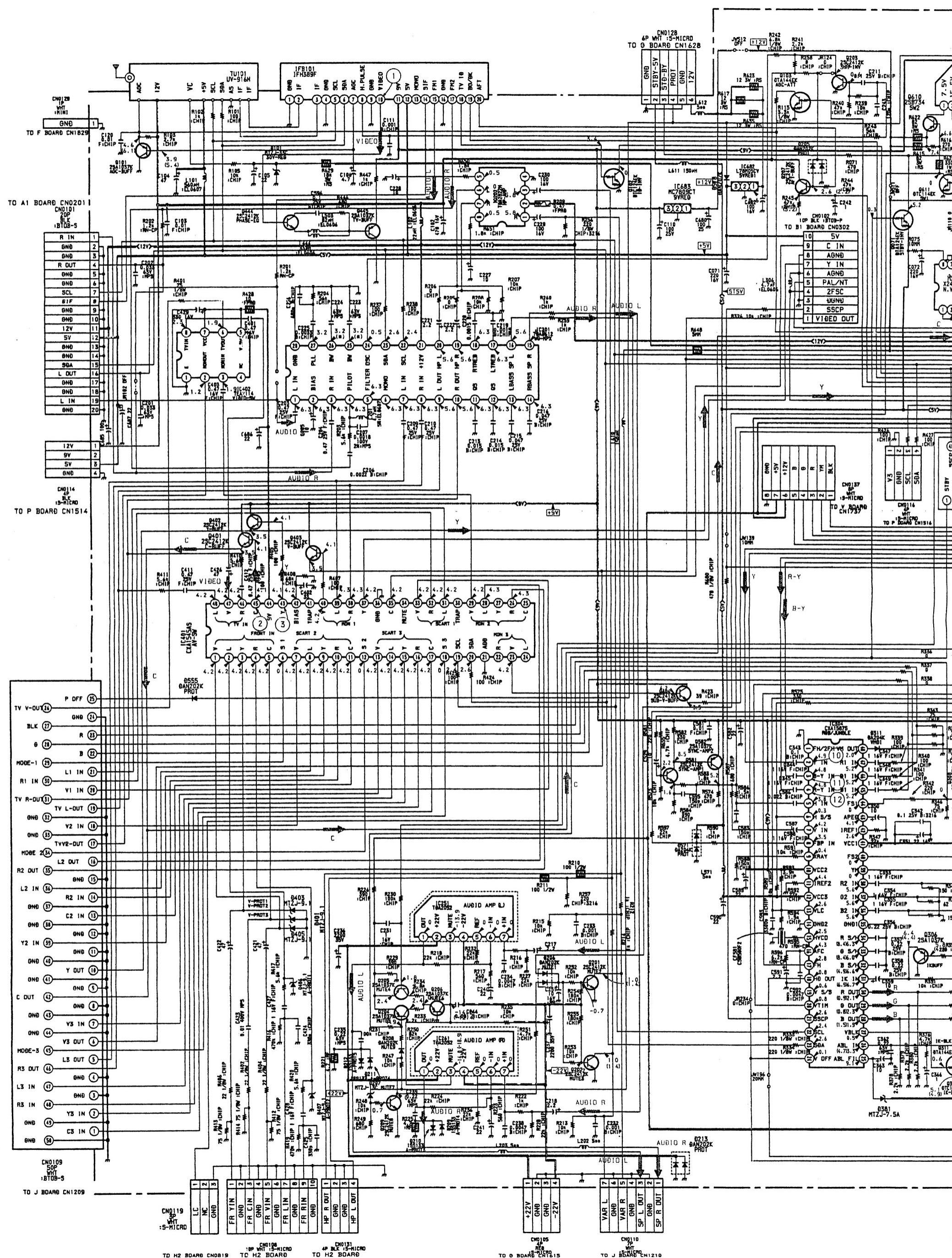
### A Board IC304 CXA1587S

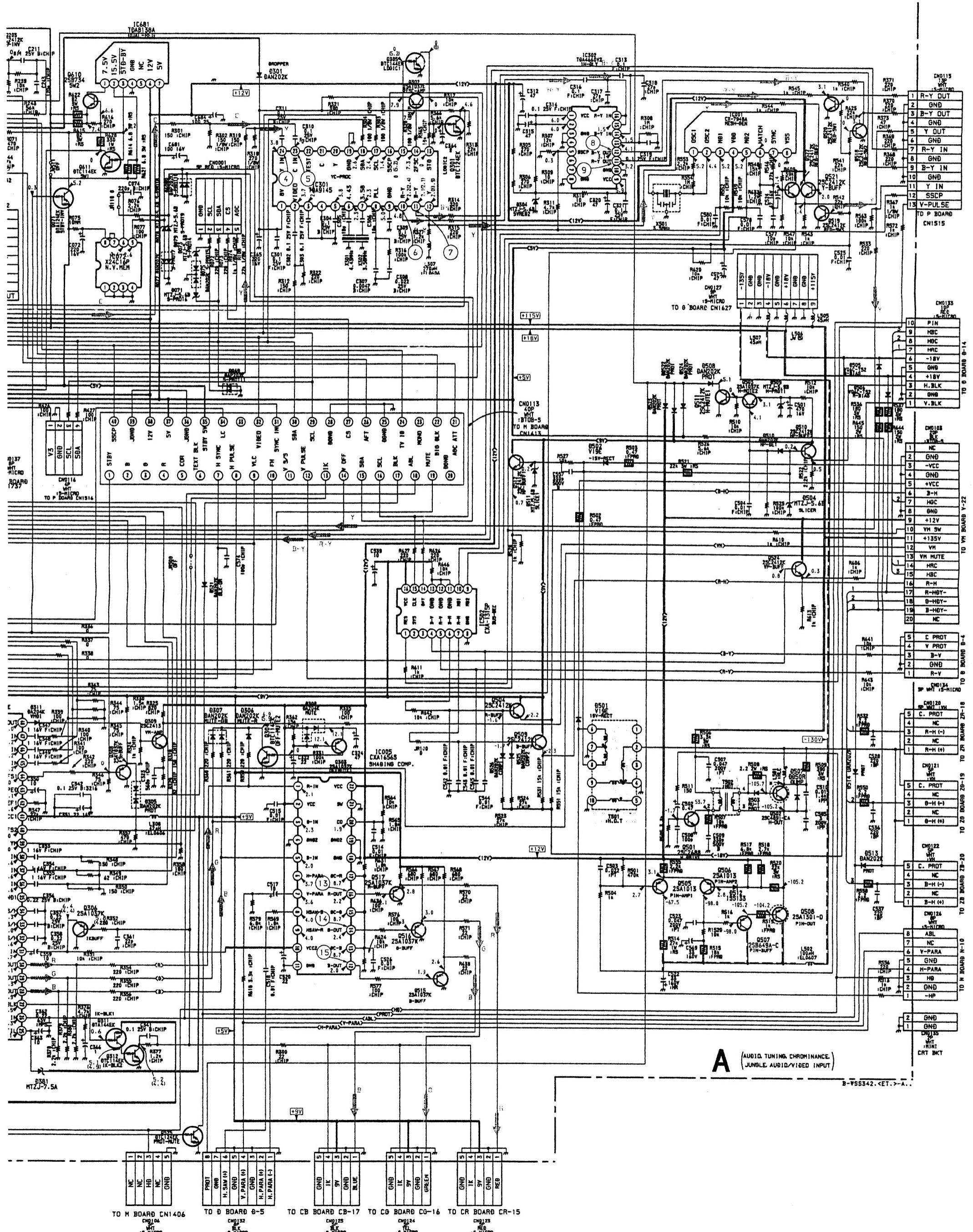


### A BOARD WAVEFORMS



#### (4) Schematic Diagram of A Board



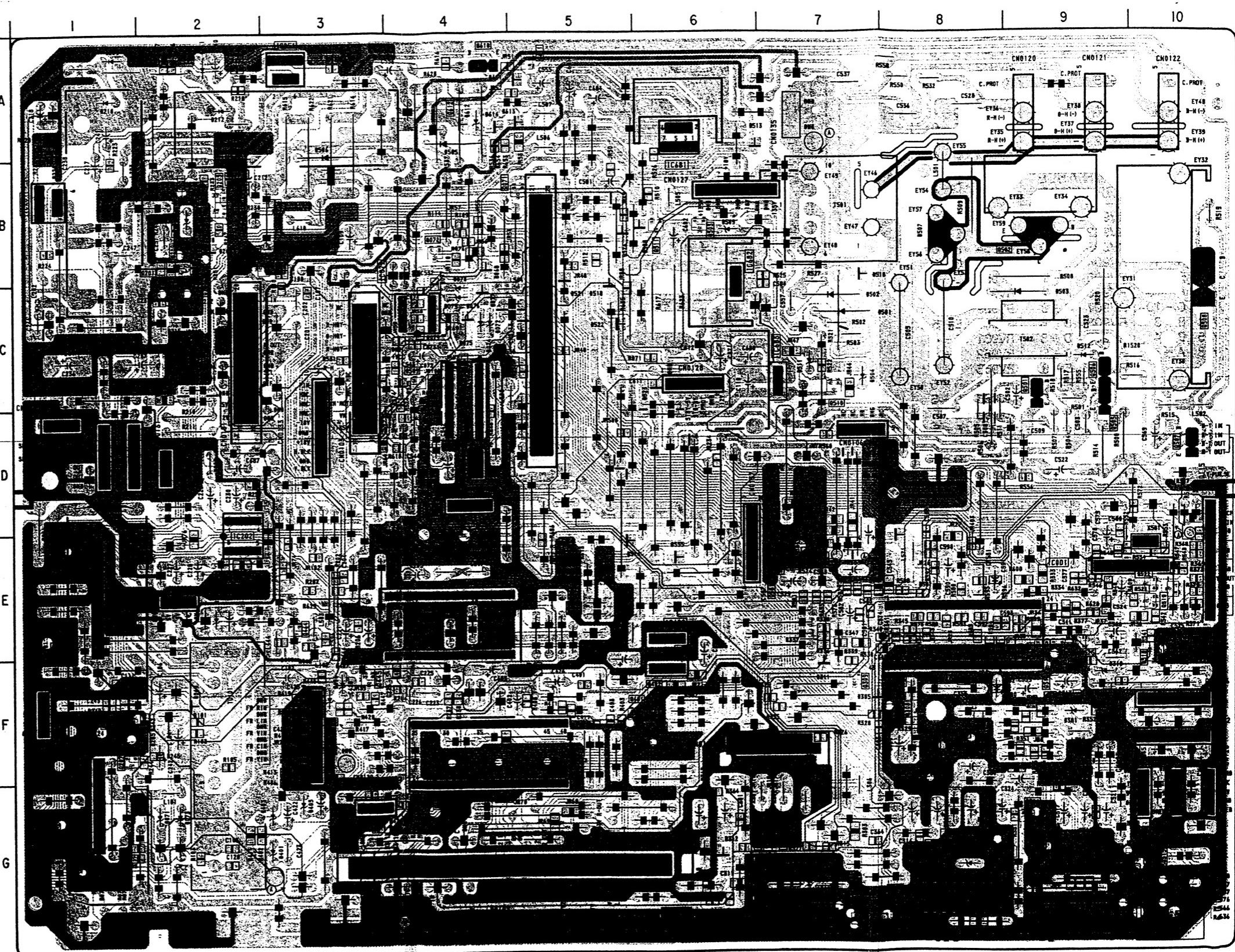


**A** [AUDIO, TUNING, CHROMINANCE,  
JUNGLE, AUDIO/VIDEO INPUT]

## A Board

IC		Q402	F - 6	D207	B - 2
IC001	E - 10	Q403	F - 6	D208	B - 2
IC005	G - 9	Q404	G - 4	D209	A - 1
IC072	C - 4	Q444	E - 3	D210	A - 1
IC201	E - 4	Q445	F - 3	D211	A - 2
IC202	E - 2	Q501	C - 9	D212	A - 2
IC251	A - 3	Q502	B - 9	D213	C - 1
IC261	B - 1	Q503	B - 6	D301	G - 6
IC301	G - 7	Q504	D - 4	D304	G - 8
IC302	G - 8	Q505	C - 9	D305	F - 7
IC304	E - 8	Q506	C - 9	D306	G - 9
IC401	F - 4	Q507	D - 10	D307	G - 9
IC402	E - 6	Q508	C - 10	D308	G - 9
IC502	D - 4	Q509	C - 4	D311	E - 7
IC681	A - 6	Q510	C - 7	D381	F - 9
IC682	B - 6	Q511	B - 6	D401	G - 3
IC683	C - 7	Q512	C - 7	D403	G - 3
<hr/>					
<b>TRANSISTOR</b>					
Q071	B - 5	Q517	G - 10	D407	F - 3
Q101	G - 1	Q518	F - 10	D501	C - 7
Q102	G - 1	Q519	E - 10	D502	C - 7
Q103	G - 1	Q520	F - 10	D503	C - 9
Q201	C - 2	Q521	E - 10	D504	C - 7
Q202	C - 2	Q522	E - 10	D505	A - 4
Q203	F - 1	Q524	E - 5	D506	A - 3
Q204	B - 2	Q525	E - 9	D507	B - 8
Q205	B - 2	Q581	E - 7	D508	B - 6
Q206	B - 2	Q582	D - 7	D509	B - 6
Q207	F - 1	Q610	A - 4	D510	B - 7
Q209	B - 2	Q611	A - 5	D511	C - 7
<hr/>					
<b>DIODE</b>					
Q301	G - 8	D068	B - 4	D513	A - 7
Q302	G - 7	D069	F - 2	D514	E - 5
Q303	G - 9	D071	G - 2	D518	C - 5
Q304	G - 9	D073	G - 2	D521	B - 5
Q305	G - 7	D075	G - 2	D522	C - 5
Q306	F - 9	D077	C - 4	D523	C - 6
Q308	F - 8	D078	C - 4	D524	B - 5
Q309	F - 7	D079	C - 4	D525	C - 4
Q311	E - 9	D101	E - 2	D526	D - 4
Q312	E - 9	D205	F - 2	D555	E - 6
Q401	F - 6	D206	B - 2	D571	E - 8

## - A Board -



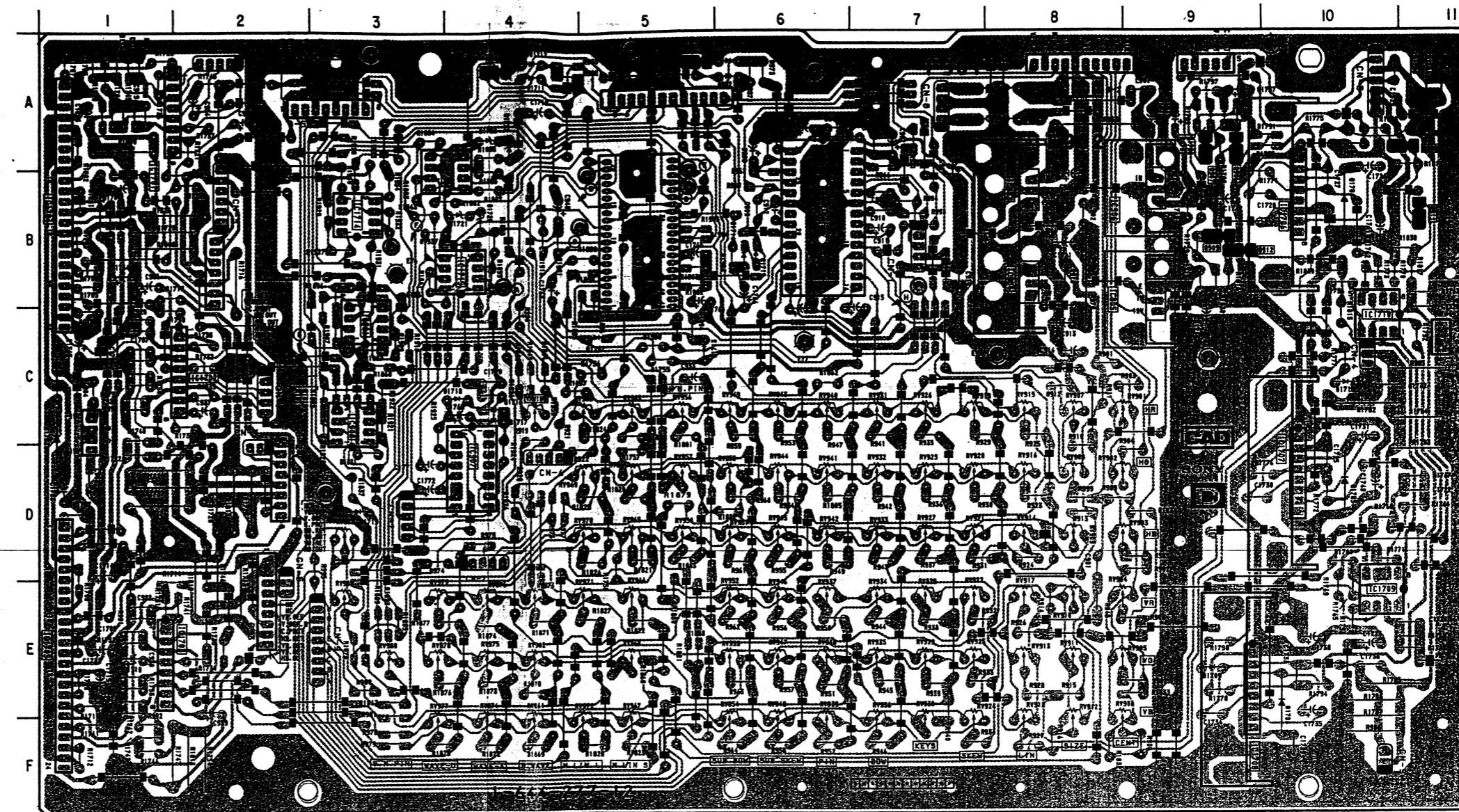
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

**D** [REGISTRATION  
DEFLECTION  
V-OUT, SUB-OUT]

D Board

IC	TRANSISTOR	
IC901 C - 3	Q902 A - 5	RV938 E - 6
IC902 B - 6	Q906 A - 9	RV939 F - 6
IC903 B - 8	Q907 A - 9	RV940 C - 6
IC904 B - 8	Q908 A - 4	RV941 D - 6
IC905 B - 9	Q909 B - 9	RV942 D - 6
IC906 B - 9	Q910 A - 11	RV943 C - 6
IC907 D - 4	Q911 B - 11	RV944 D - 6
IC908 C - 3	Q912 B - 9	RV945 D - 6
IC910 B - 5		RV946 E - 6
IC1701 A - 1		RV947 E - 6
IC1702 C - 2		RV948 F - 6
IC1703 E - 1		RV949 C - 6
IC1704 B - 1		RV950 D - 6
IC1705 E - 1		RV951 D - 6
IC1706 B - 10		RV901 C - 9
IC1707 D - 10		RV952 E - 6
IC1708 E - 9		RV902 D - 9
IC1709 E - 10		RV953 E - 6
IC1710 C - 10		RV903 D - 9
IC1714 B - 3		RV954 F - 6
IC1715 B - 4		RV904 E - 9
IC1718 A - 4		RV955 C - 5
		RV905 E - 9
		RV956 D - 5
		RV906 F - 9
		RV957 D - 5
		RV907 C - 8
		RV958 D - 5
		RV908 D - 8
		RV959 C - 4
		RV909 D - 8
		RV960 E - 5
		RV910 E - 8
		RV961 F - 4
		RV911 E - 8
		RV962 E - 4
		RV912 F - 8
		RV963 C - 5
		RV913 E - 8
		RV964 D - 5
		RV914 D - 8
		RV965 D - 5
		RV915 C - 8
		RV966 E - 5
		RV916 D - 8
		RV967 F - 5
		RV917 E - 8
		RV968 C - 5
		RV918 F - 8
		RV969 D - 5
		RV919 C - 7
		RV970 D - 5
		RV920 D - 7
		RV971 E - 5
		RV921 D - 7
		RV972 F - 5
		RV922 F - 7
		RV973 E - 4
		RV923 F - 7
		RV974 F - 4
		RV924 F - 7
		RV975 E - 4
		RV925 D - 7
		RV976 E - 4
		RV926 C - 7
		RV977 F - 3
		RV927 D - 7
		RV978 E - 3
		RV928 E - 7
		RV979 E - 3
		RV929 E - 7
		RV980 E - 3
		RV930 F - 7
		RV981 E - 3
		RV931 C - 7
		RV982 D - 3
		RV932 D - 7
		RV933 D - 7
		RV934 E - 7
		RV935 E - 7
		RV936 F - 7
		RV937 E - 6

- D Board -



## (5) Schematic Diagram of D Board

1 2 3 4 5 6 7 8 9 10 11 12

A

B

C

D

E

F

G

H

I

J

K

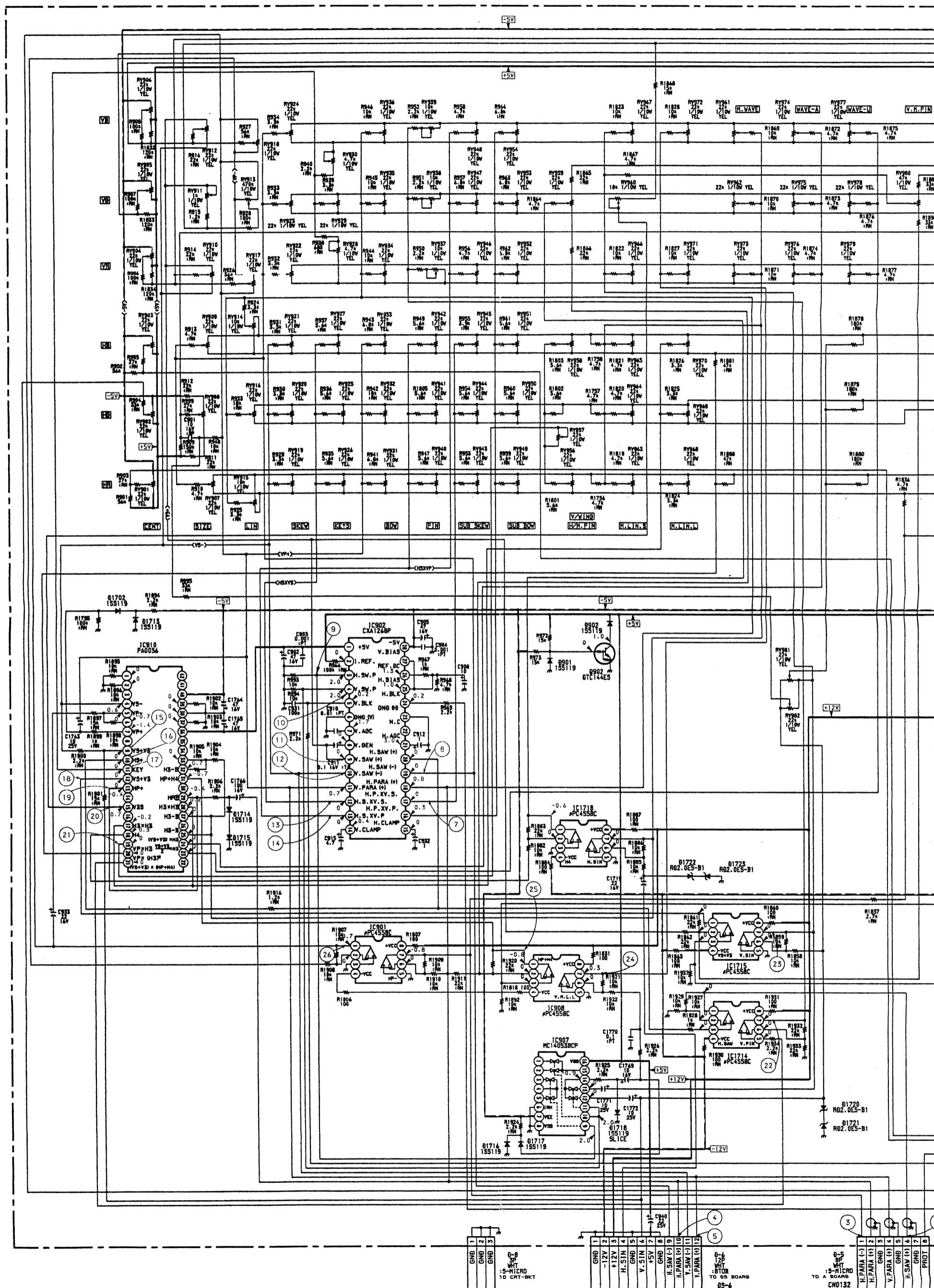
L

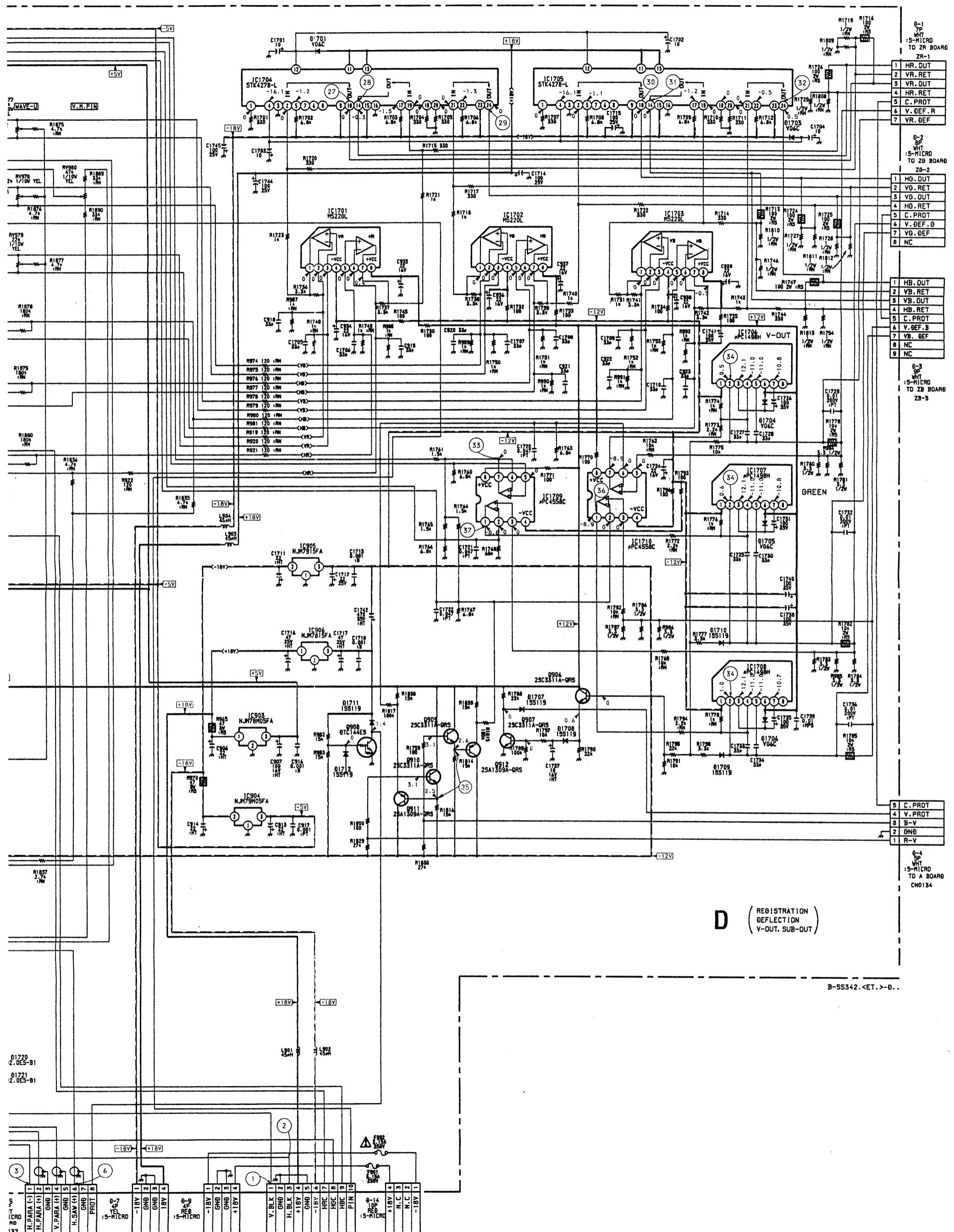
M

N

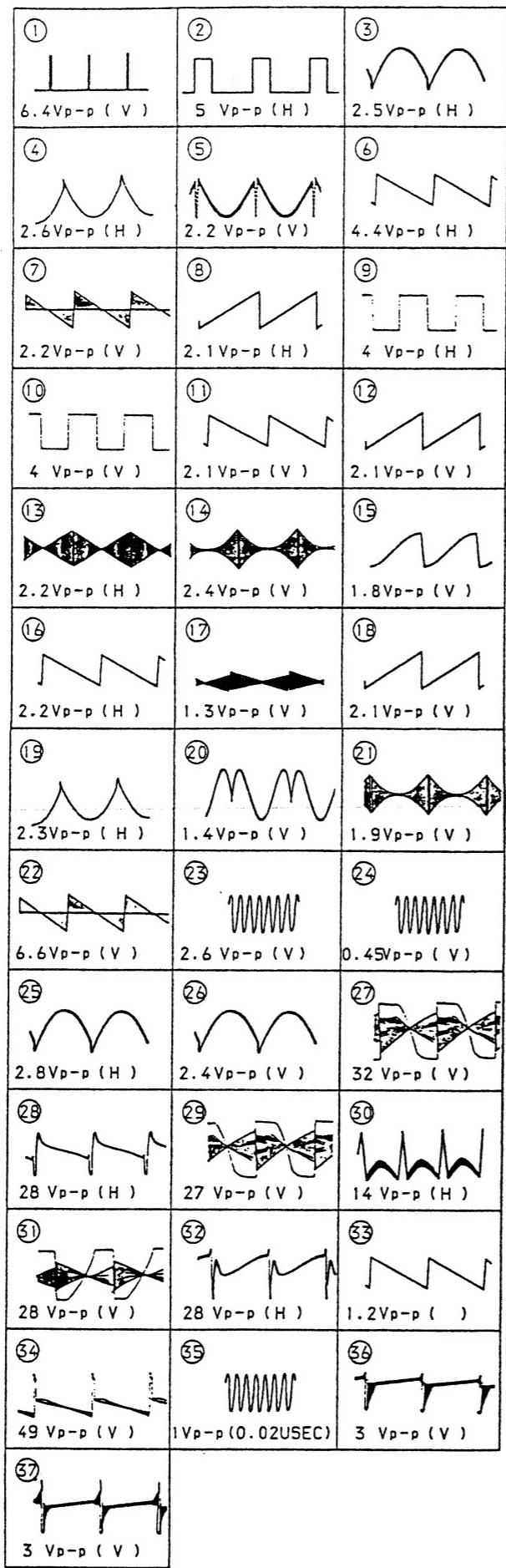
O

P

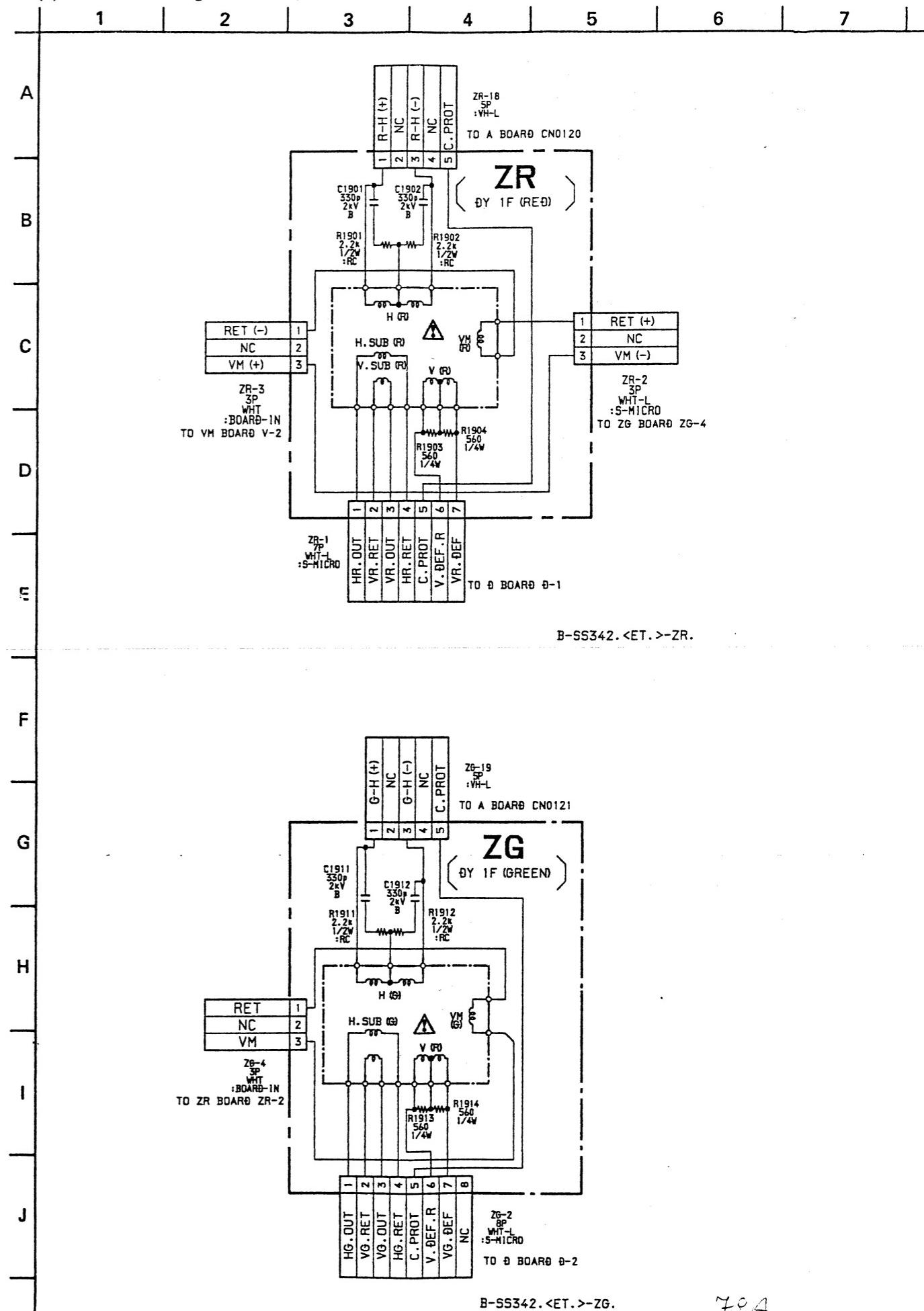




D BOARD WAVEFORMS



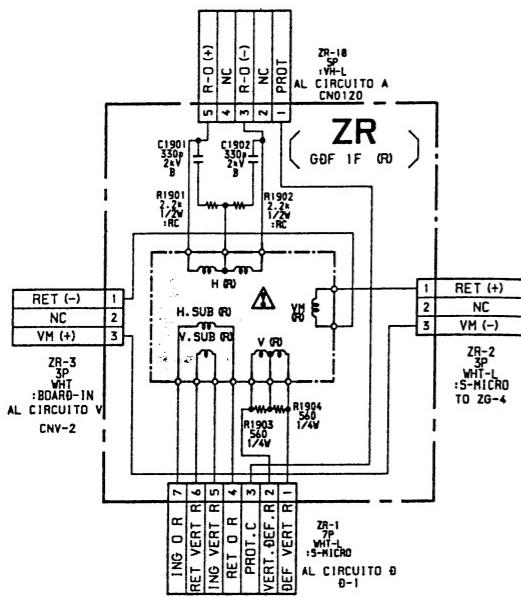
(6) Schematic Diagrams of ZR, ZG and ZB Boards



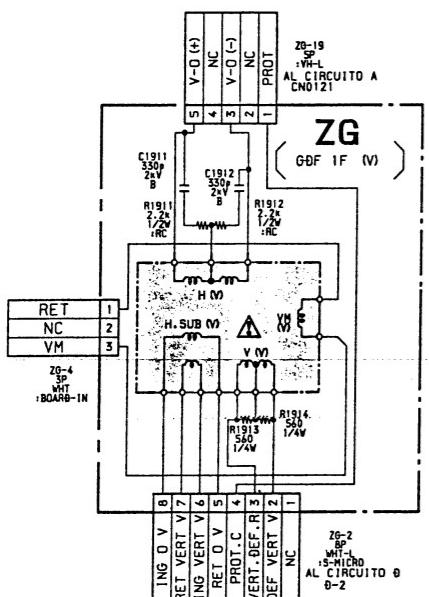
(6) Schema Elettrico Del Circuito ZR, ZG, ZB

1 2 3 4 5 6 7

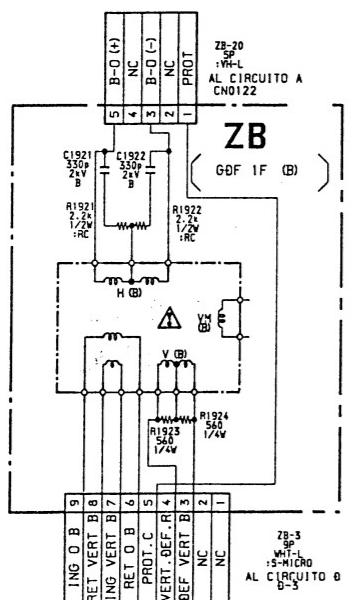
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P



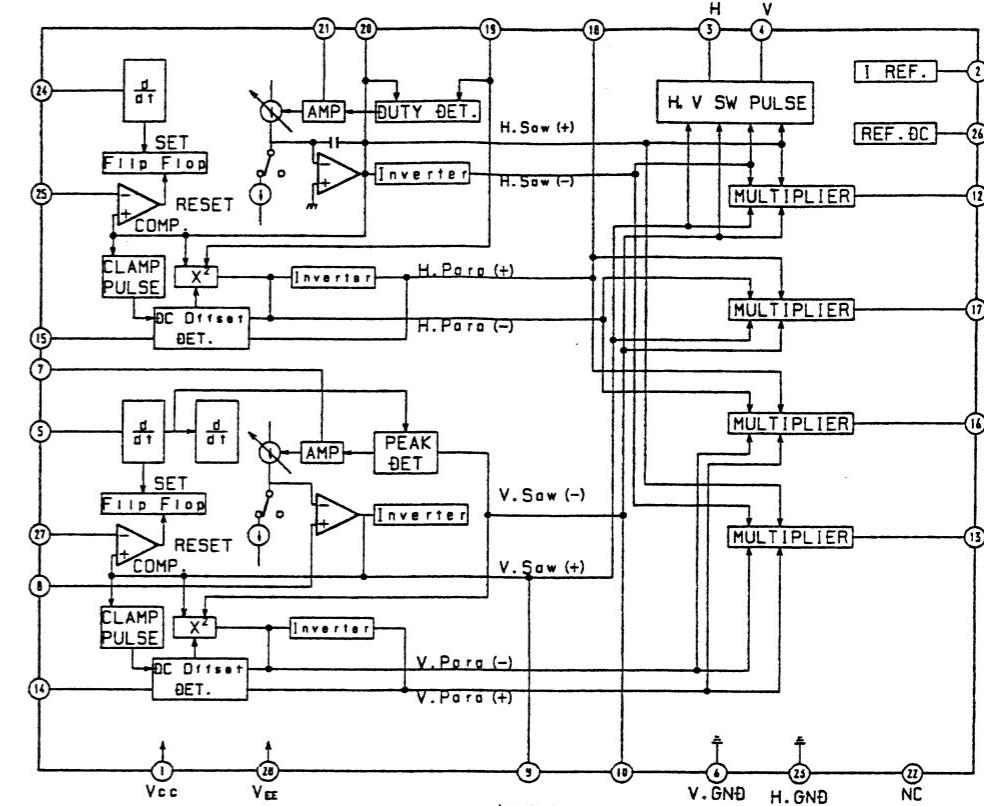
B-SS342.<ET.>-ZR.



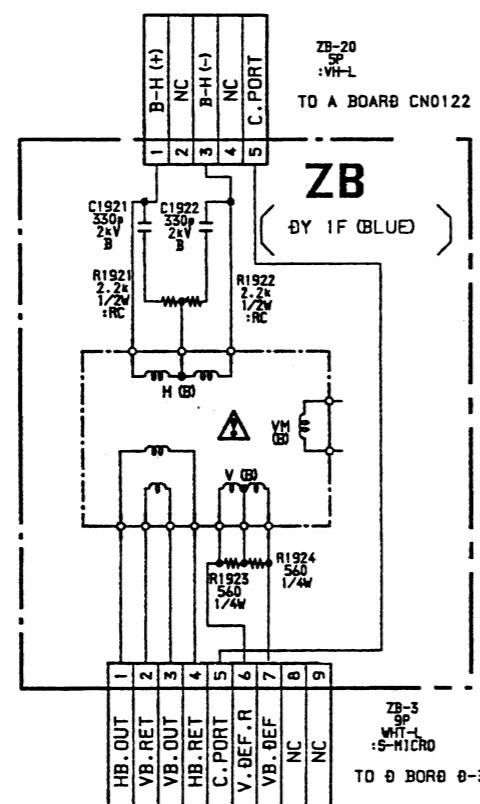
B-SS342.<ET.>-ZG.



B-SS342.<ET.>-ZB.



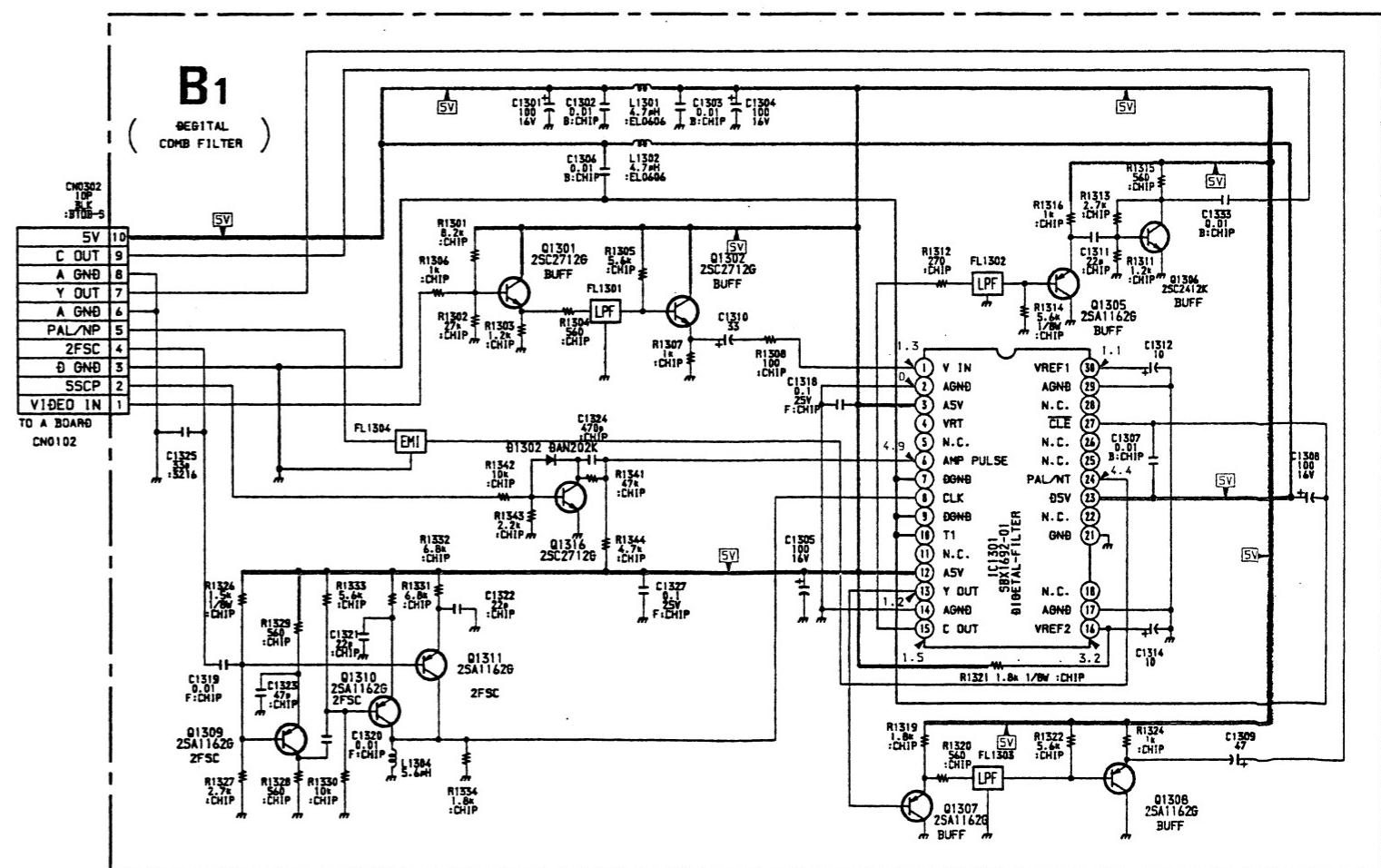
73A

K  
L  
M  
N  
O  
P

B-SS342.&lt;ET.&gt;-ZB.

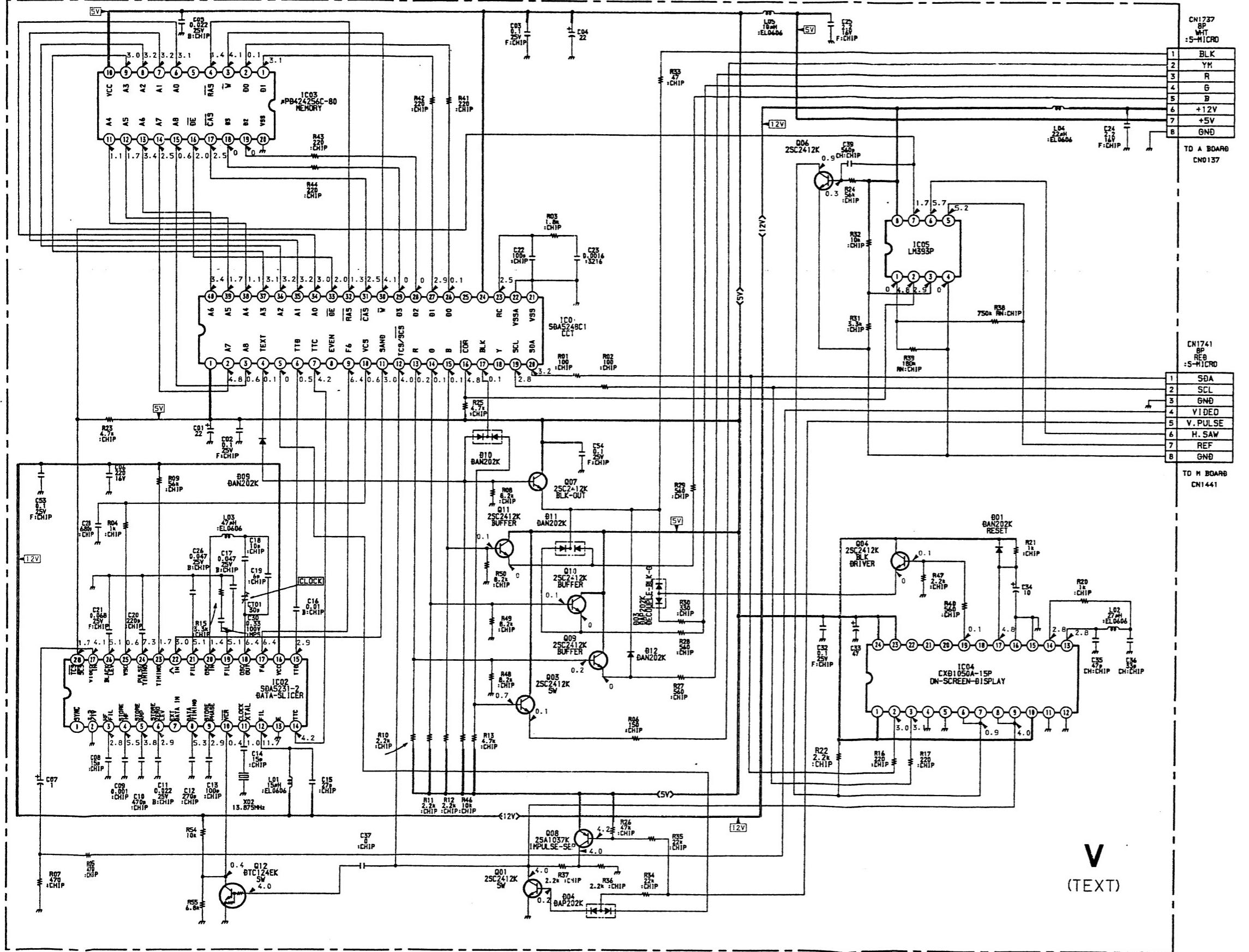
-79-

## \*) Schematic Diagrams of B1 and V Boards



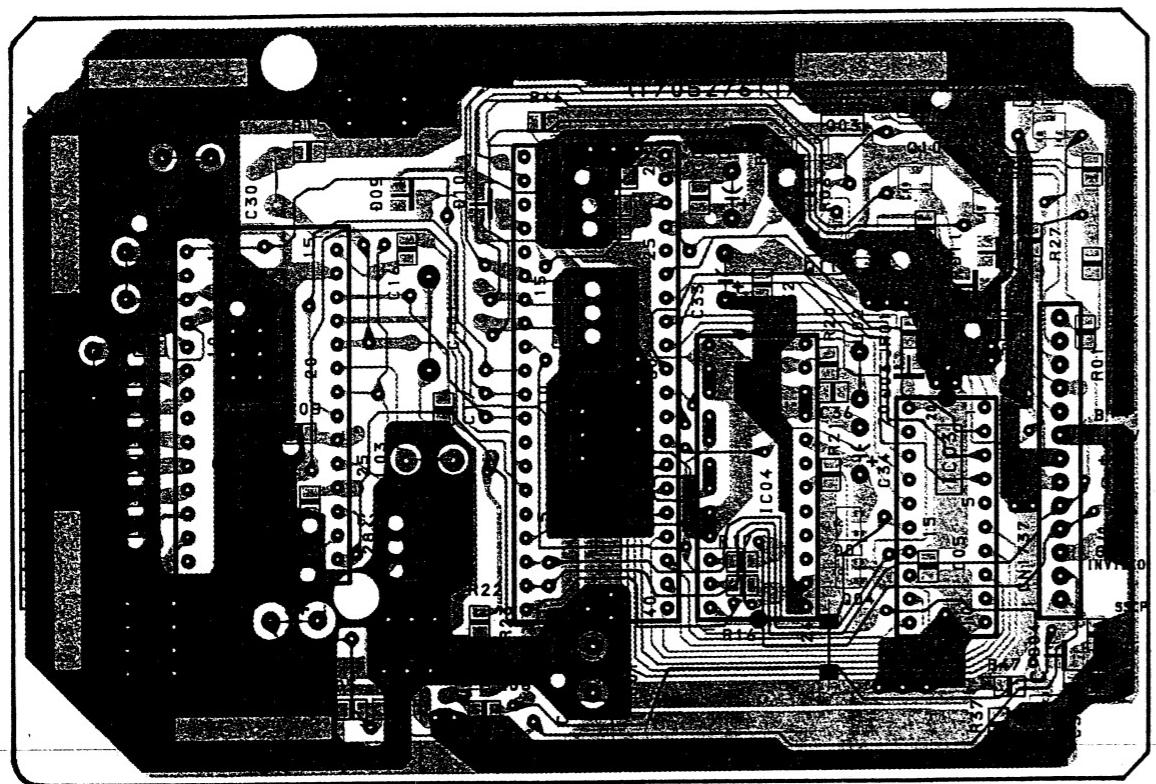
-80-

B-SS342.&lt;ET.&gt;-B1.

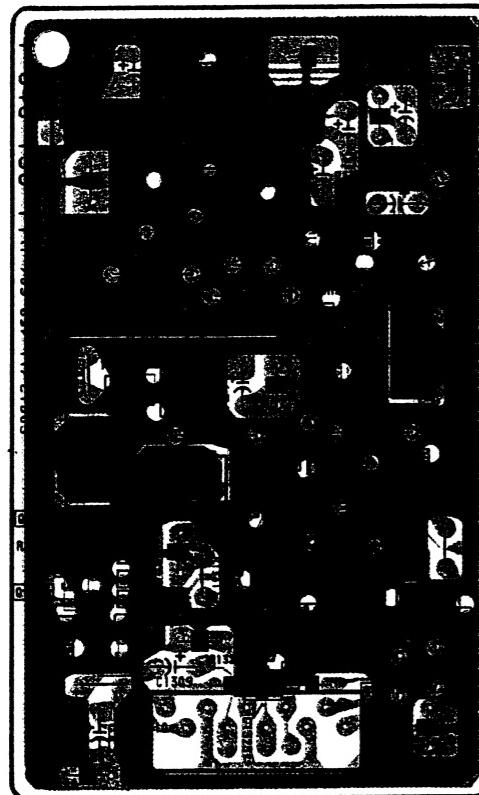


**B1** [DIGITAL COMB FILTER]**V** [TEXT]**ZR** [DY 1F (RED)]**ZG** [DY 1F (GREEN)]**ZB** [DY 1F (BLUE)]

## - V Board -

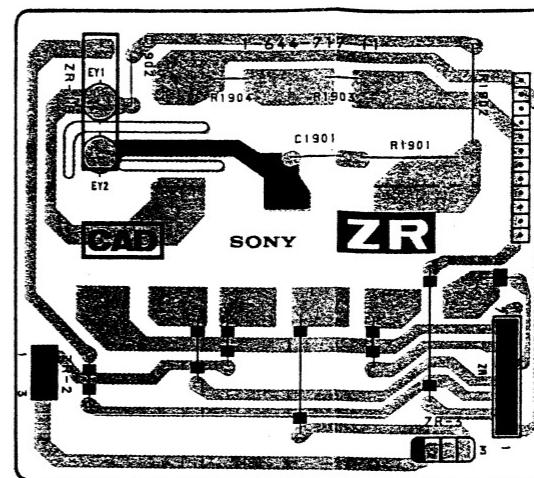


- B1 Board -

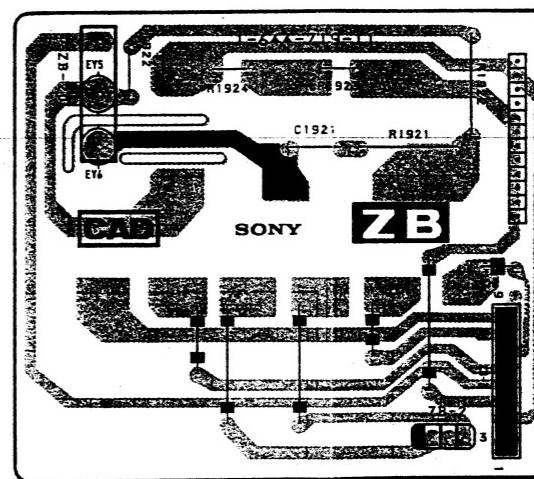


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

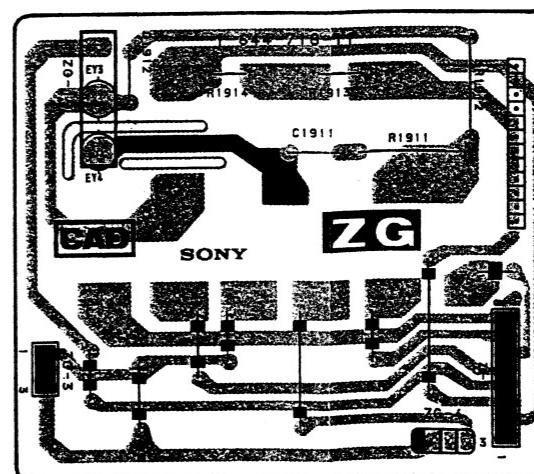
## - ZR Board -



## - ZG Board -



## - ZB Board -



## (8) Schematic Diagram of N Board

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A

B

C

D

E

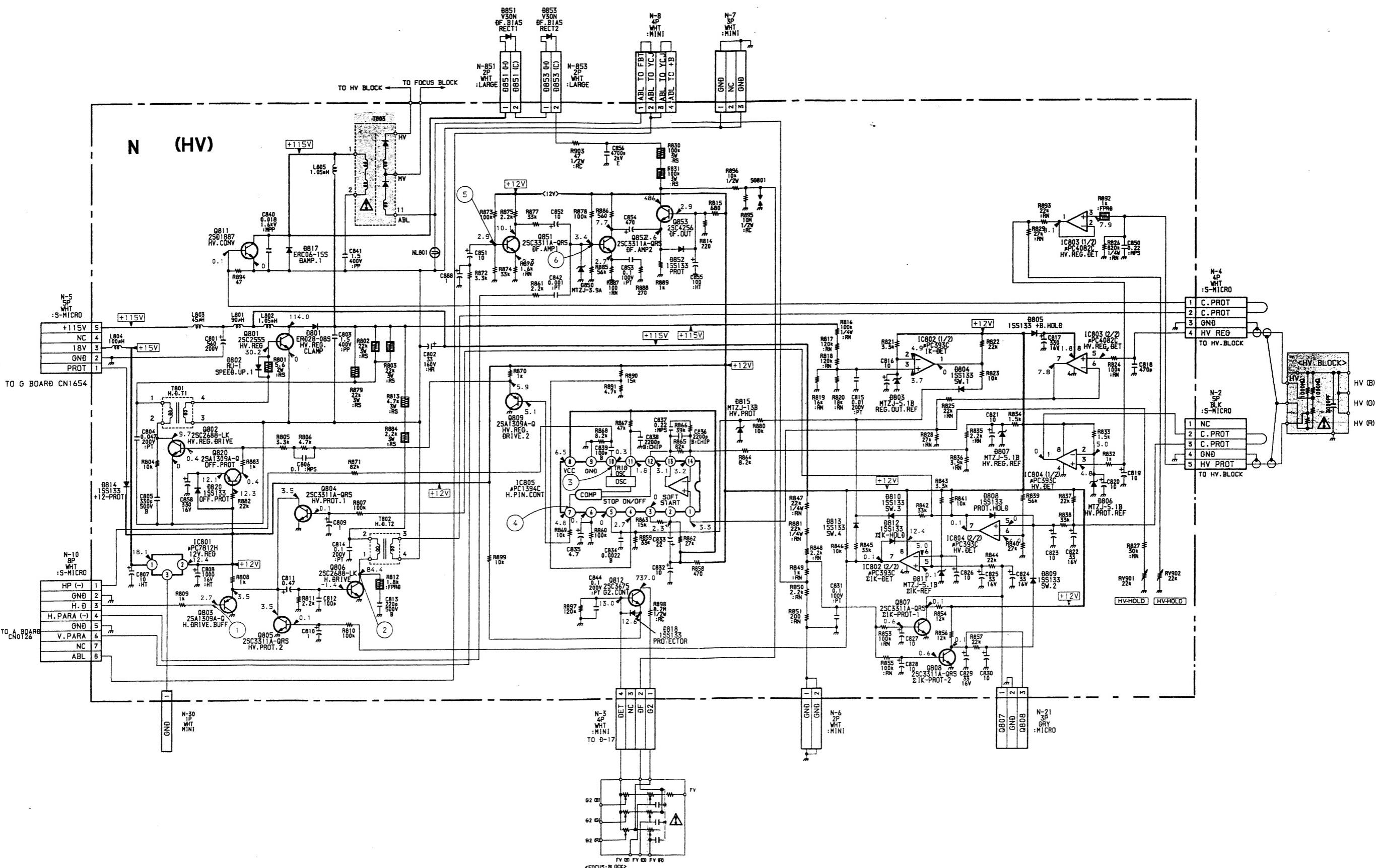
F

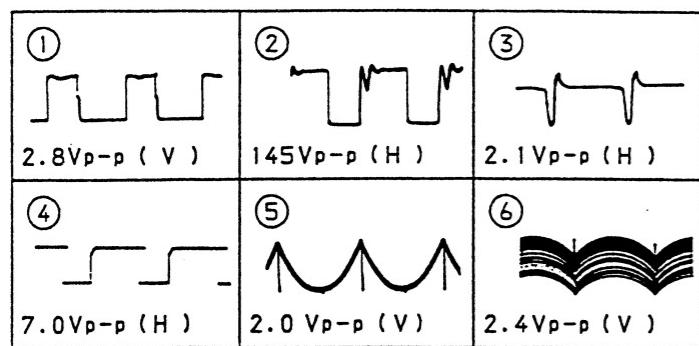
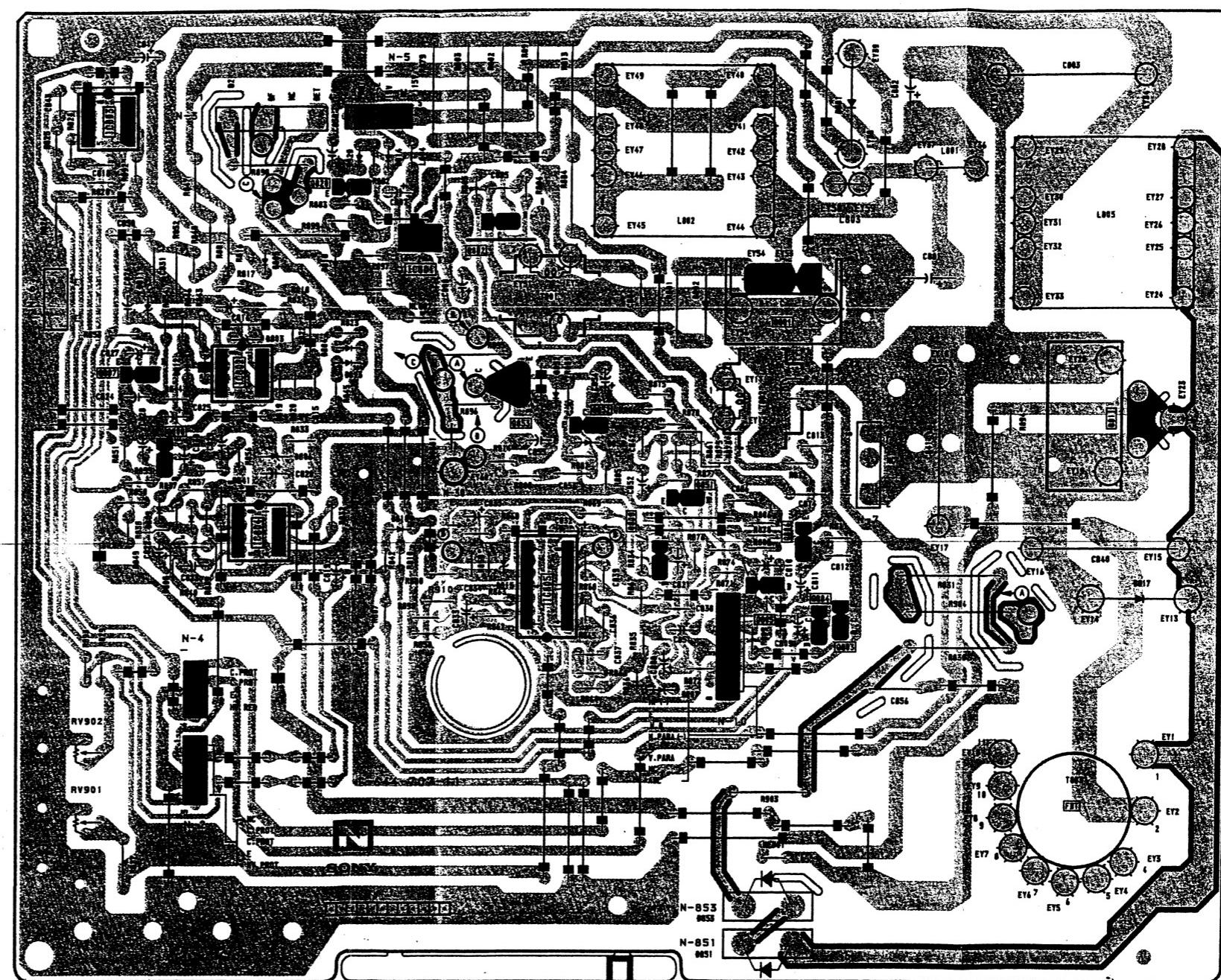
G

H

I

J



**N** [HV]**N BOARD WAVEFORMS****- N Board -**

**KP-S4613**  
**RM-832**

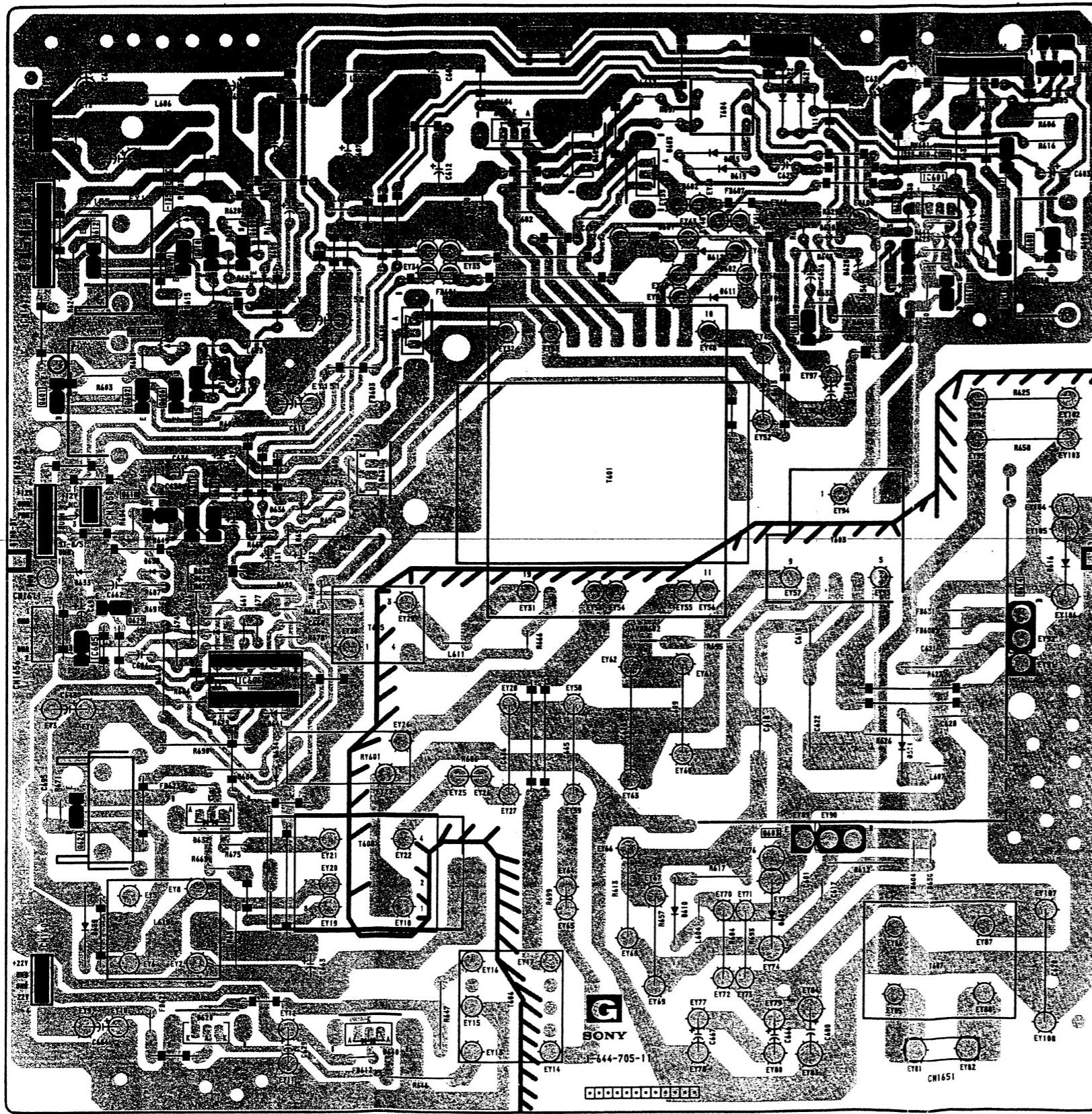
**KP-S4613**  
**RM-832**

**G** [POWER SUPPLY]

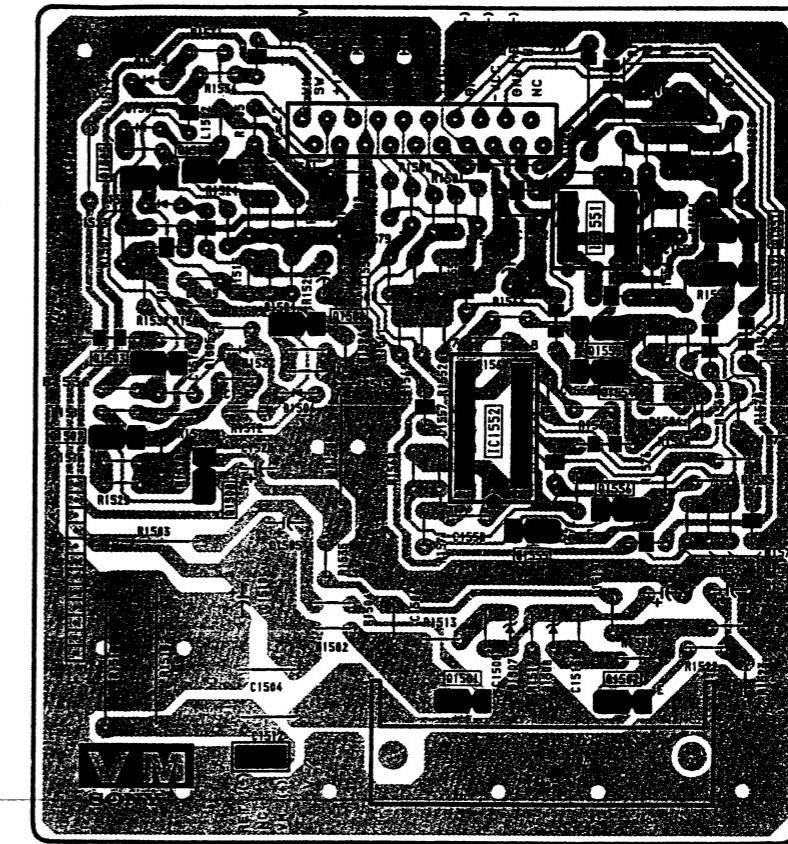
**VM** [VM AMP]

**Ds** [SIN, WAVE, GEN]

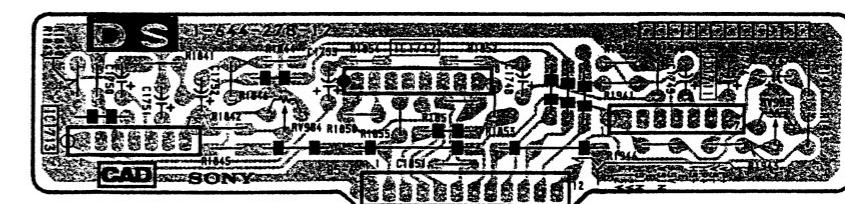
- G Board -



– VM Board –

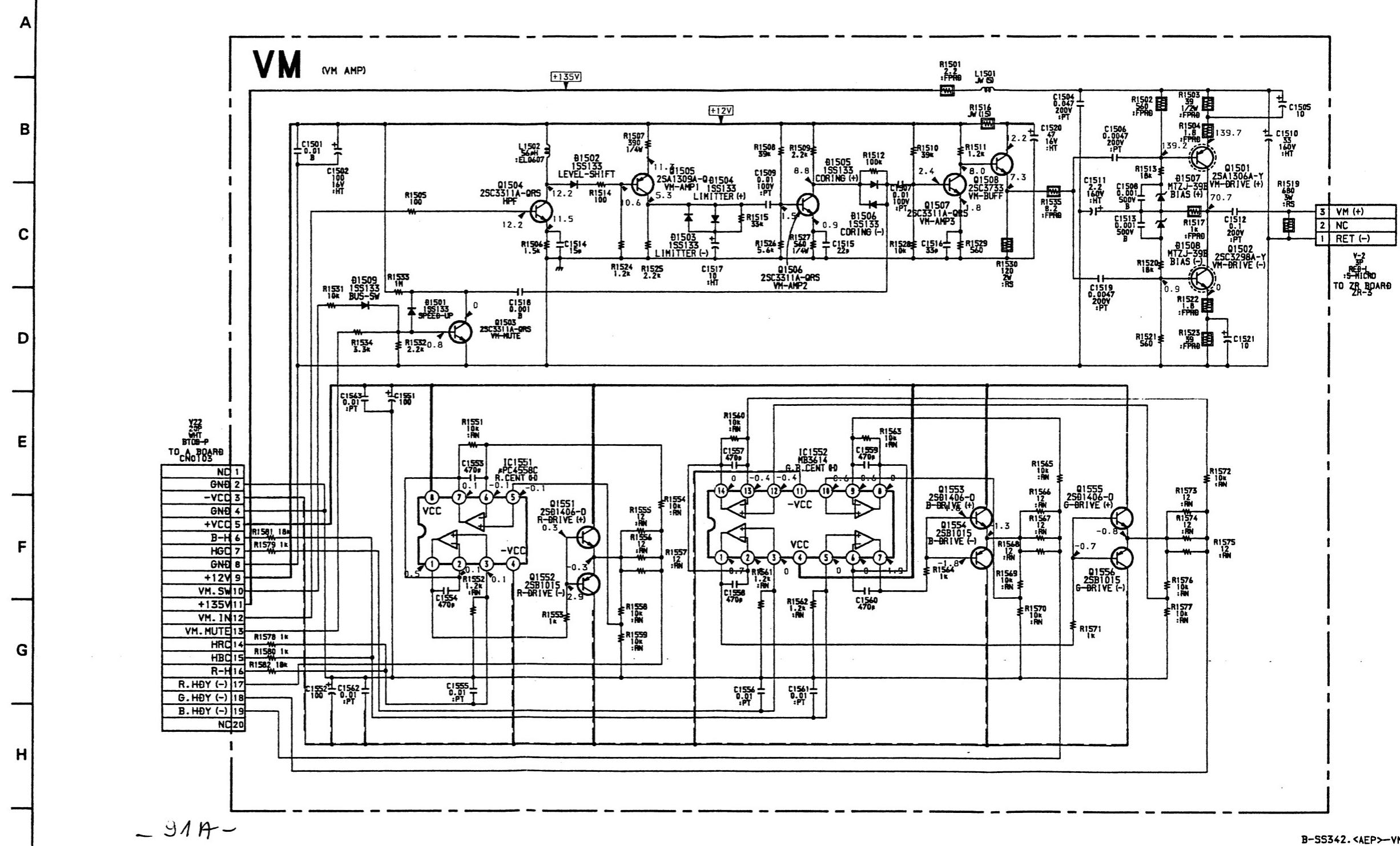


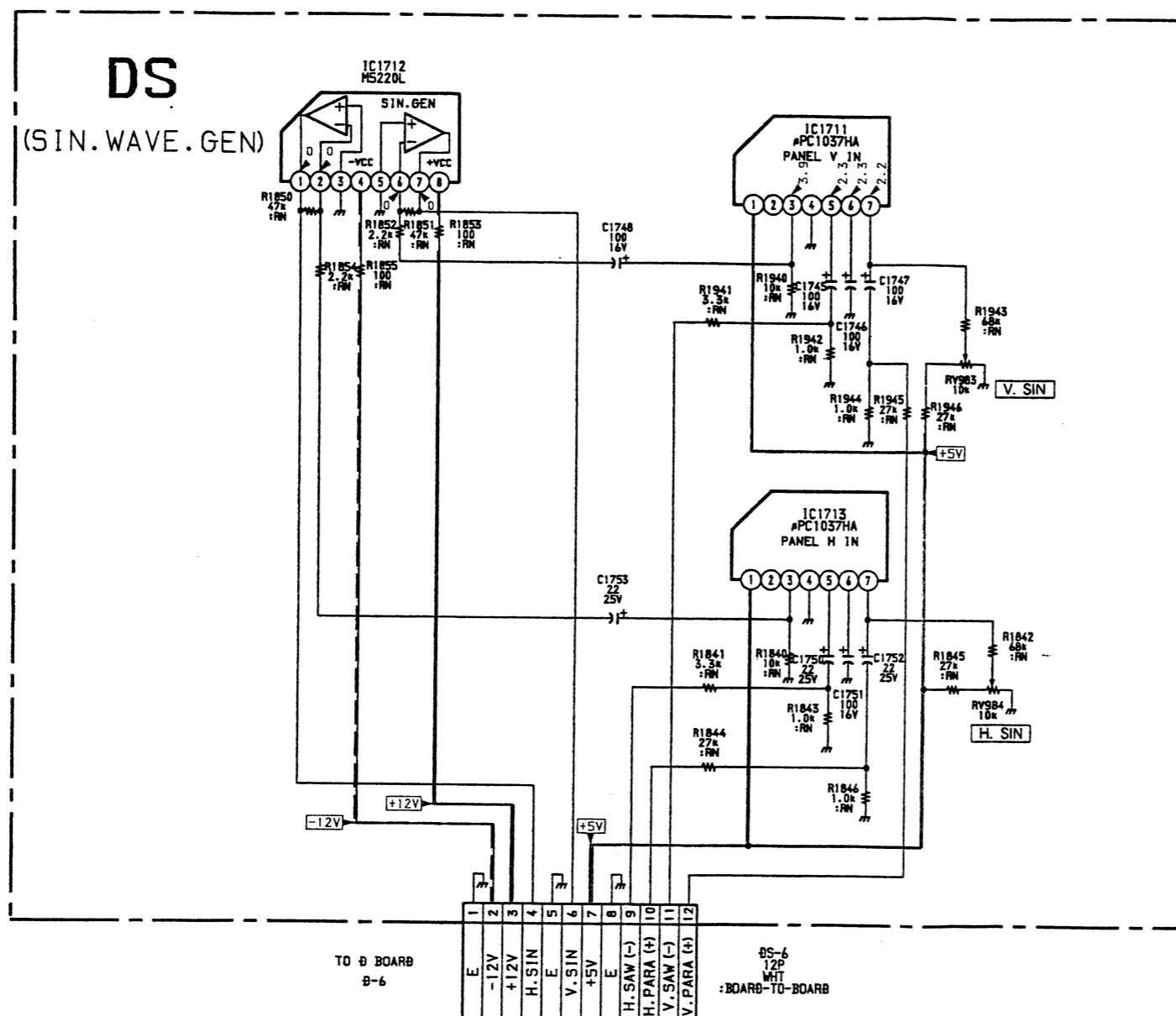
- DS Board -



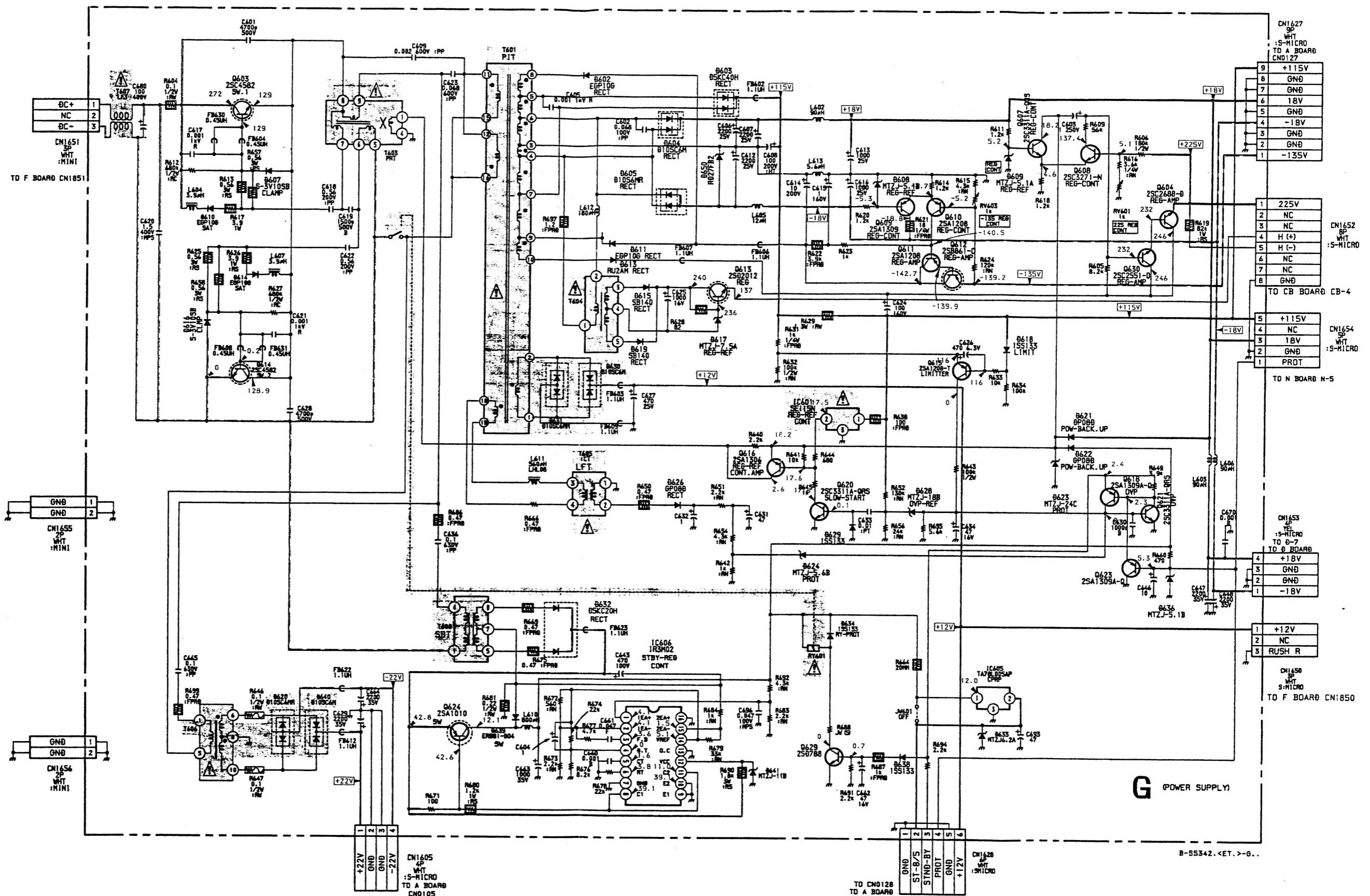
## (9) Schematic Diagrams of VM, DS and G Boards

**1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13**



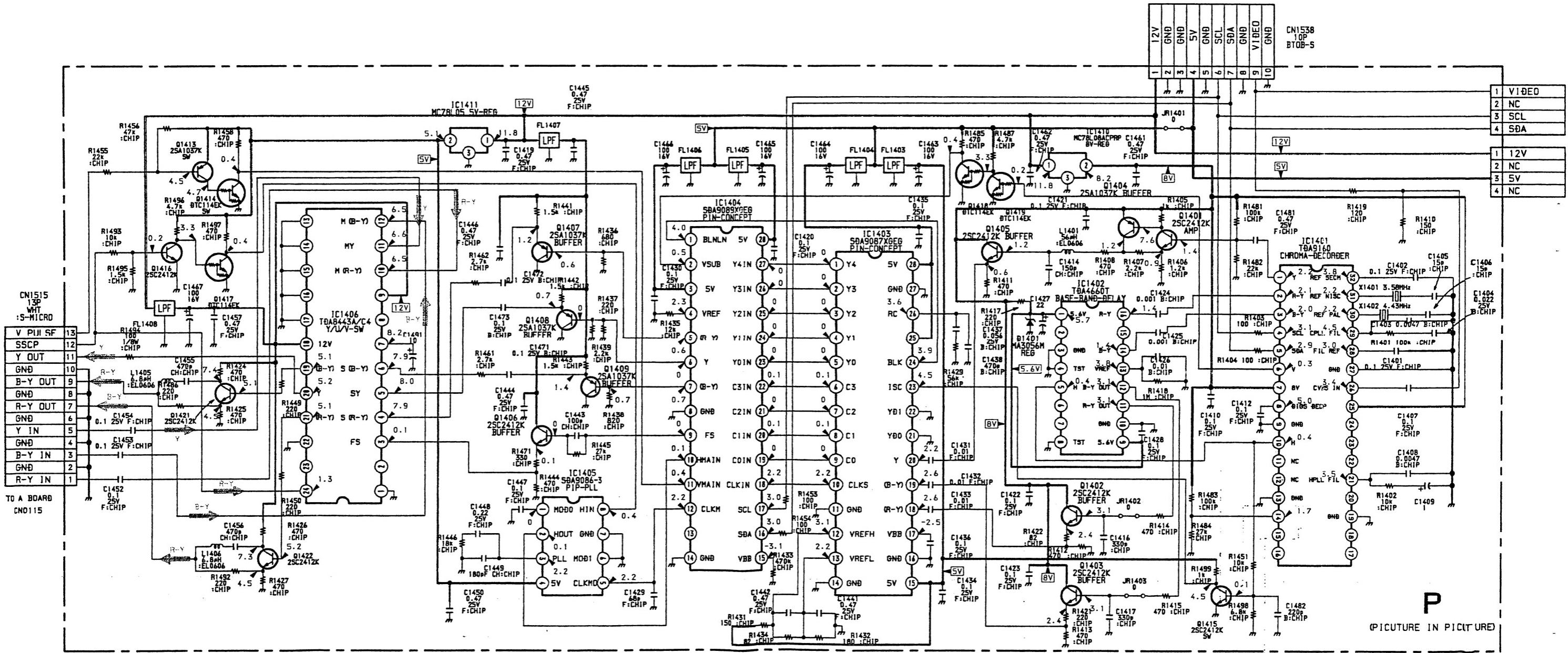


B-55342. <ET. >-DS.

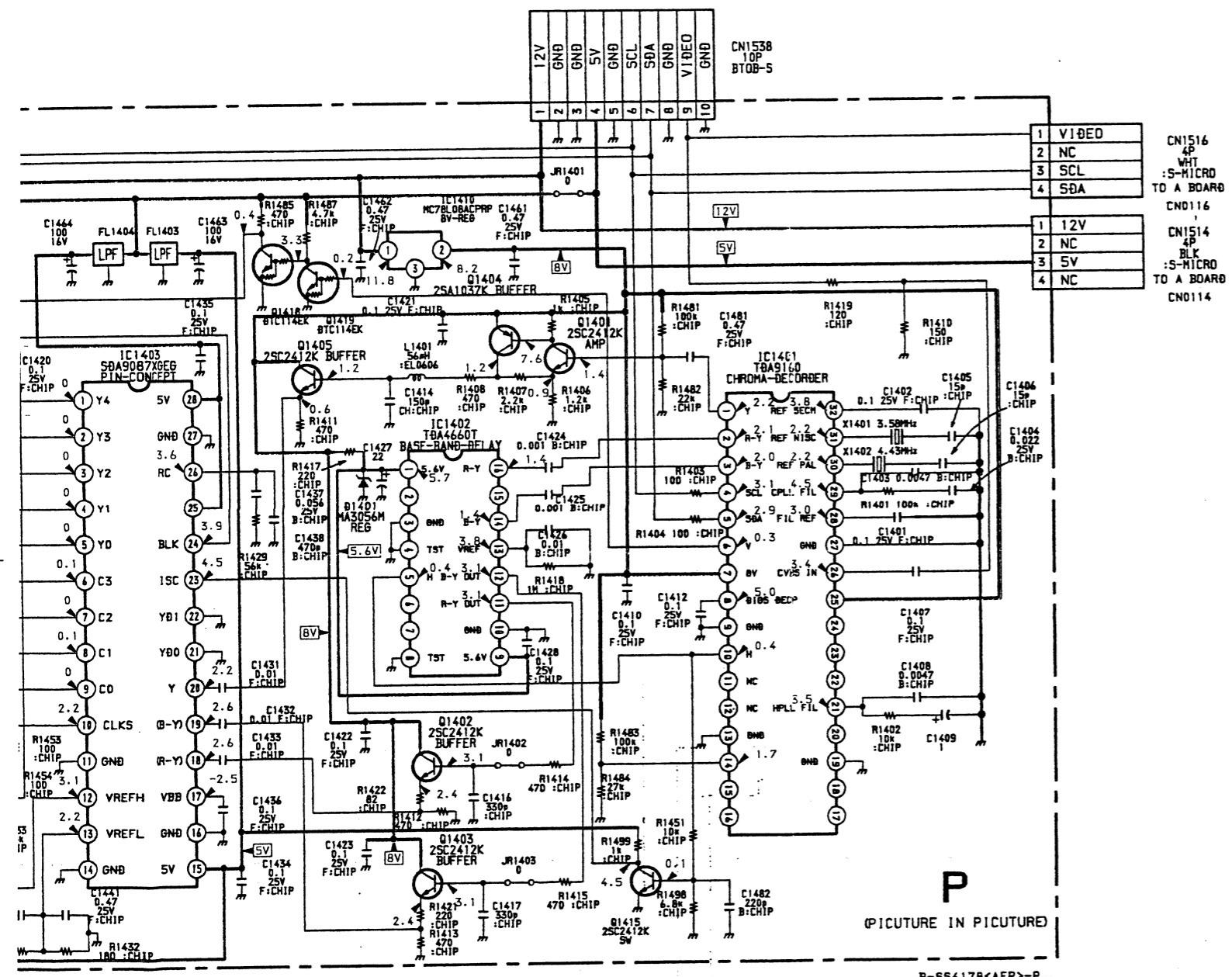


Schematic Diagrams of CR, CG, CB and P Boards (10)

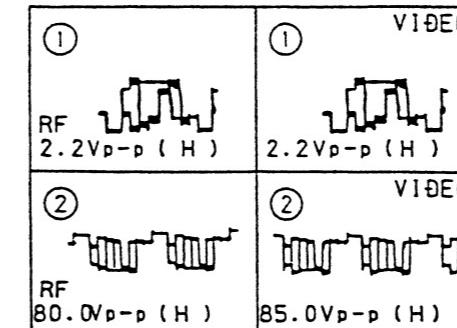
**1**      **2**      **3**      **4**      **5**      **6**      **7**      **8**      **9**      **10**      **11**      **12**      **13**      **14**      **15**      **16**      **17**      **18**



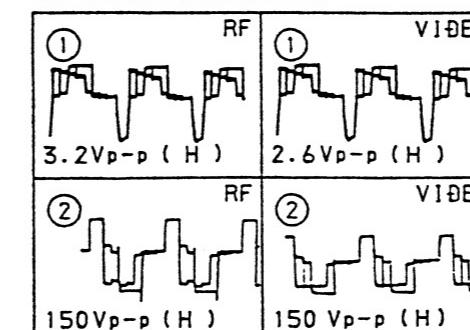
0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



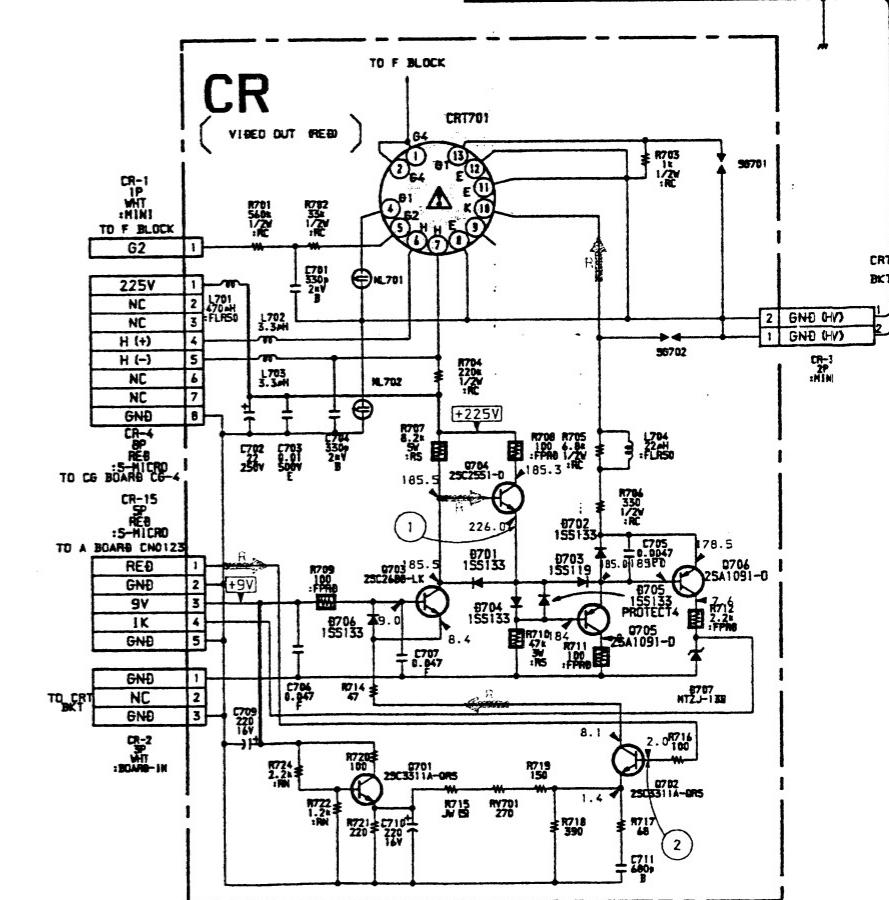
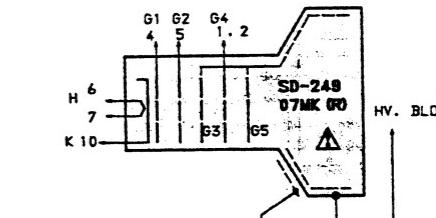
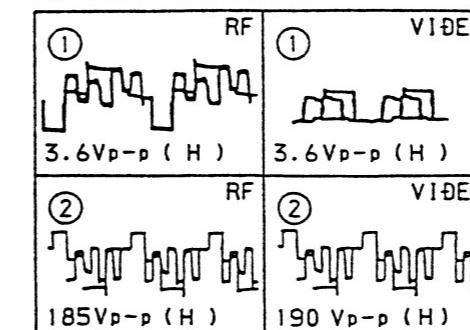
### CR BOARD WAVEFORMS

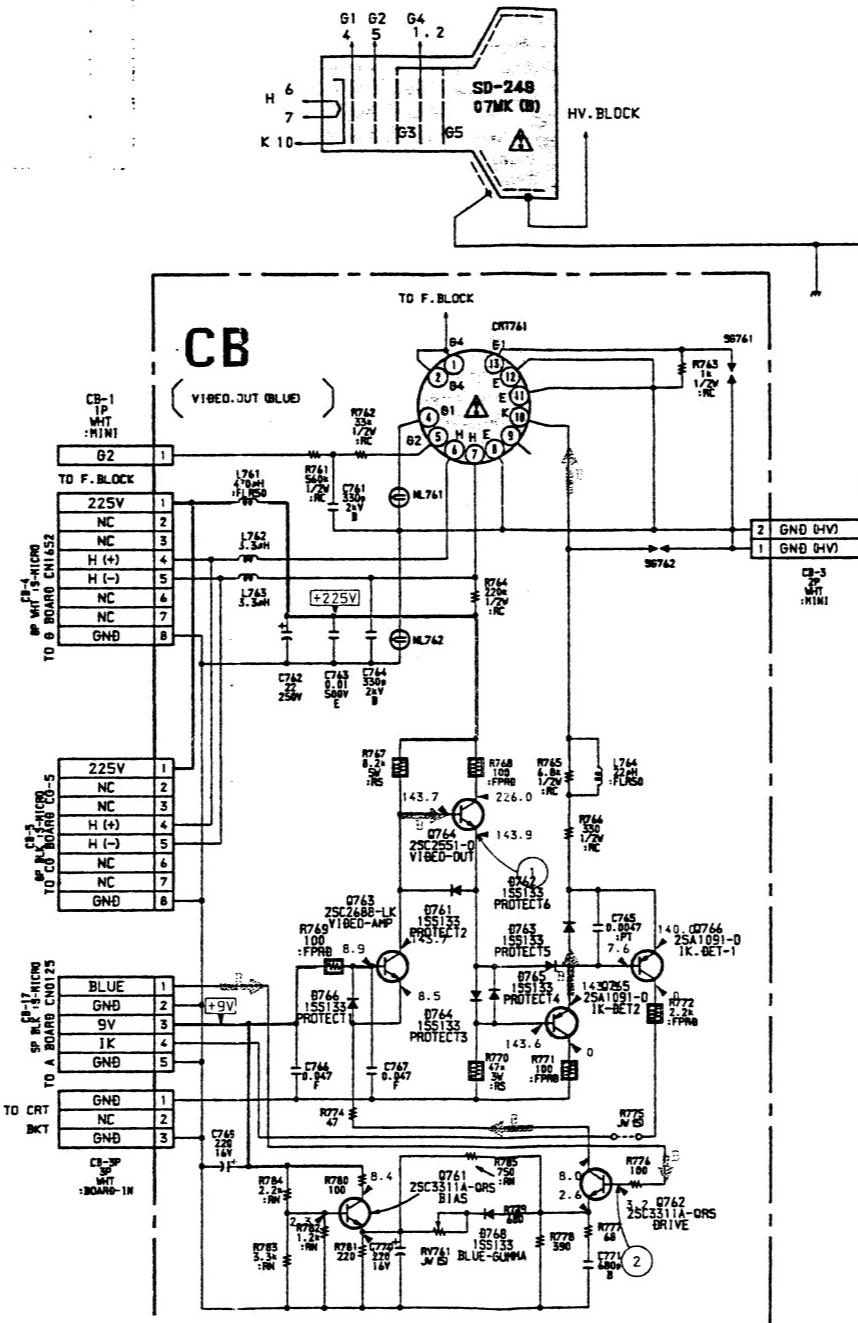
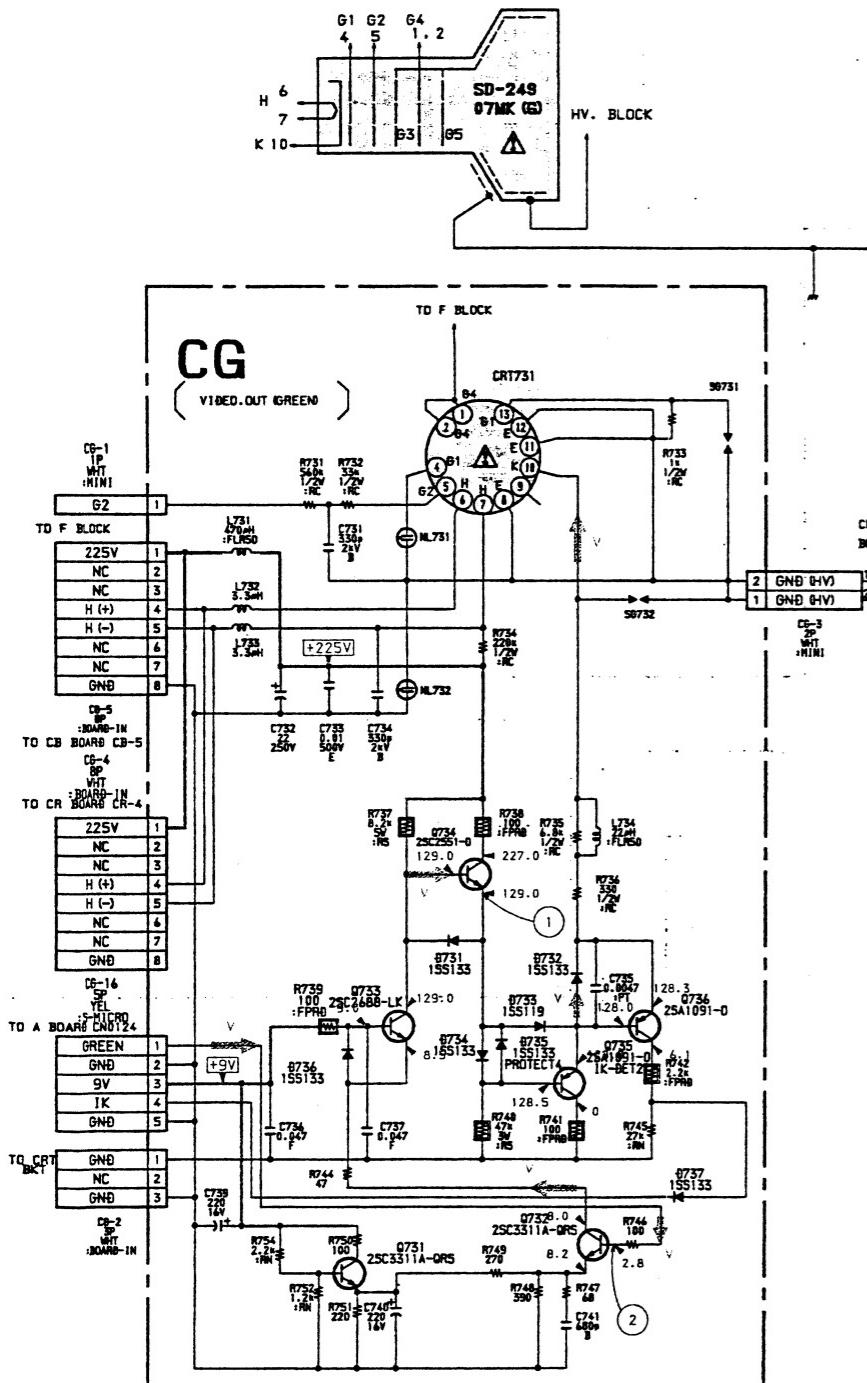


### CG BOARD WAVEFORMS

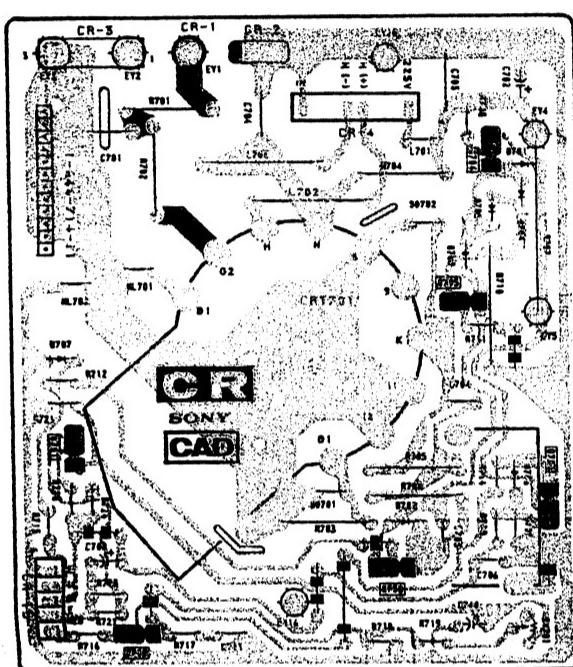


### CB BOARD WAVEFORMS

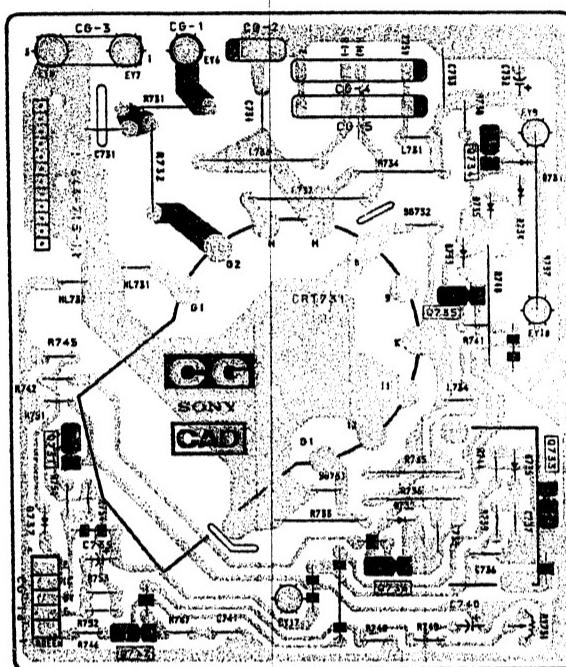




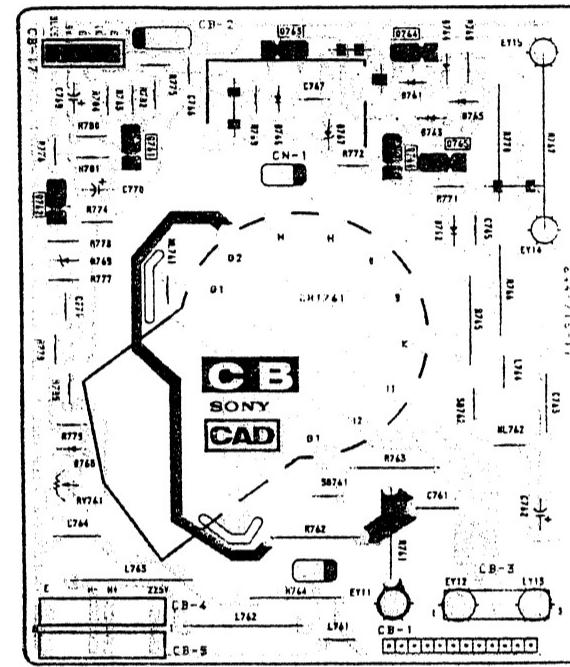
- CR Board -



- CG Board -



- CB Board -



- 97 -

P [P N P]

CR

[VIDEO OUT (R)]

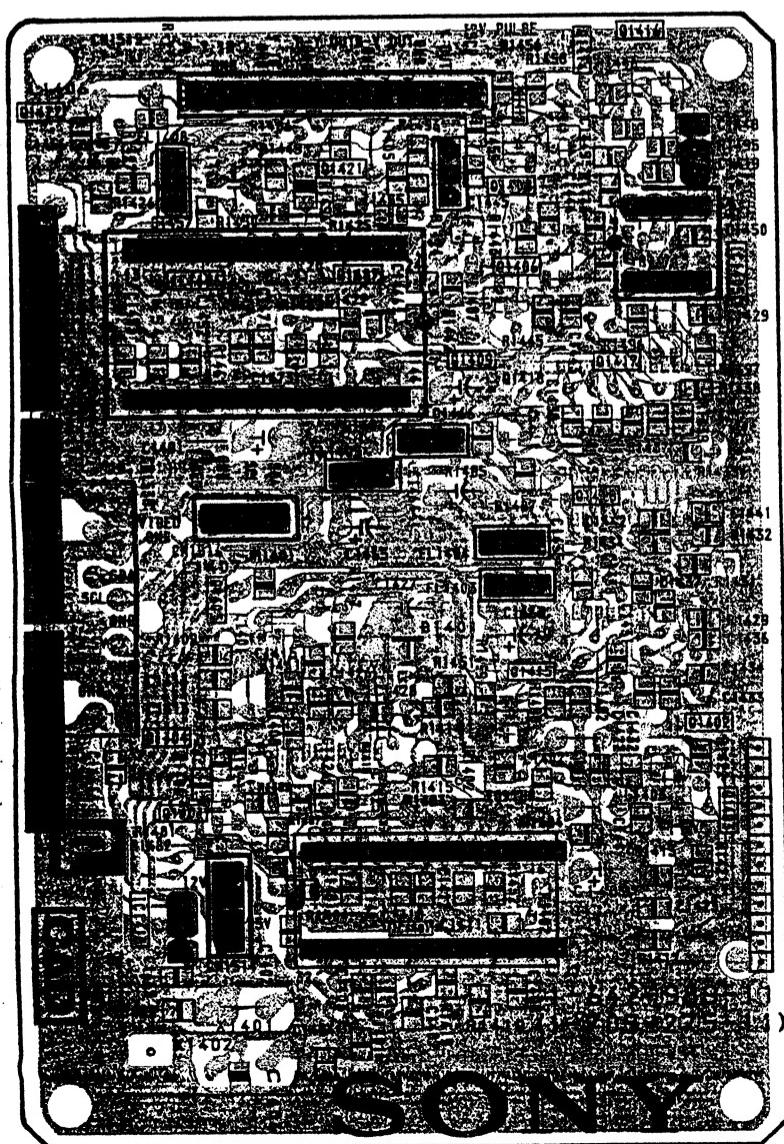
C<sub>G</sub>

[VIDEO OUT (G)]

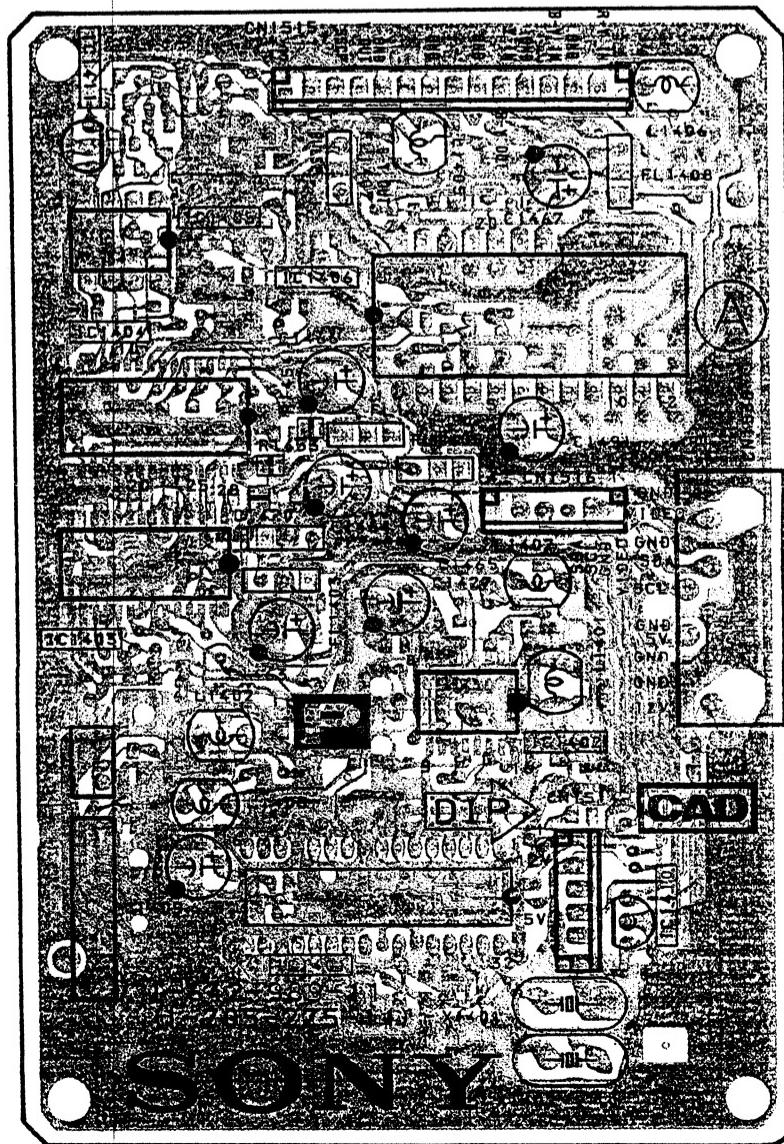
C<sub>B</sub>

**3** [VIDEO OUT (B)]

**– P Board (Conductor Side) –**



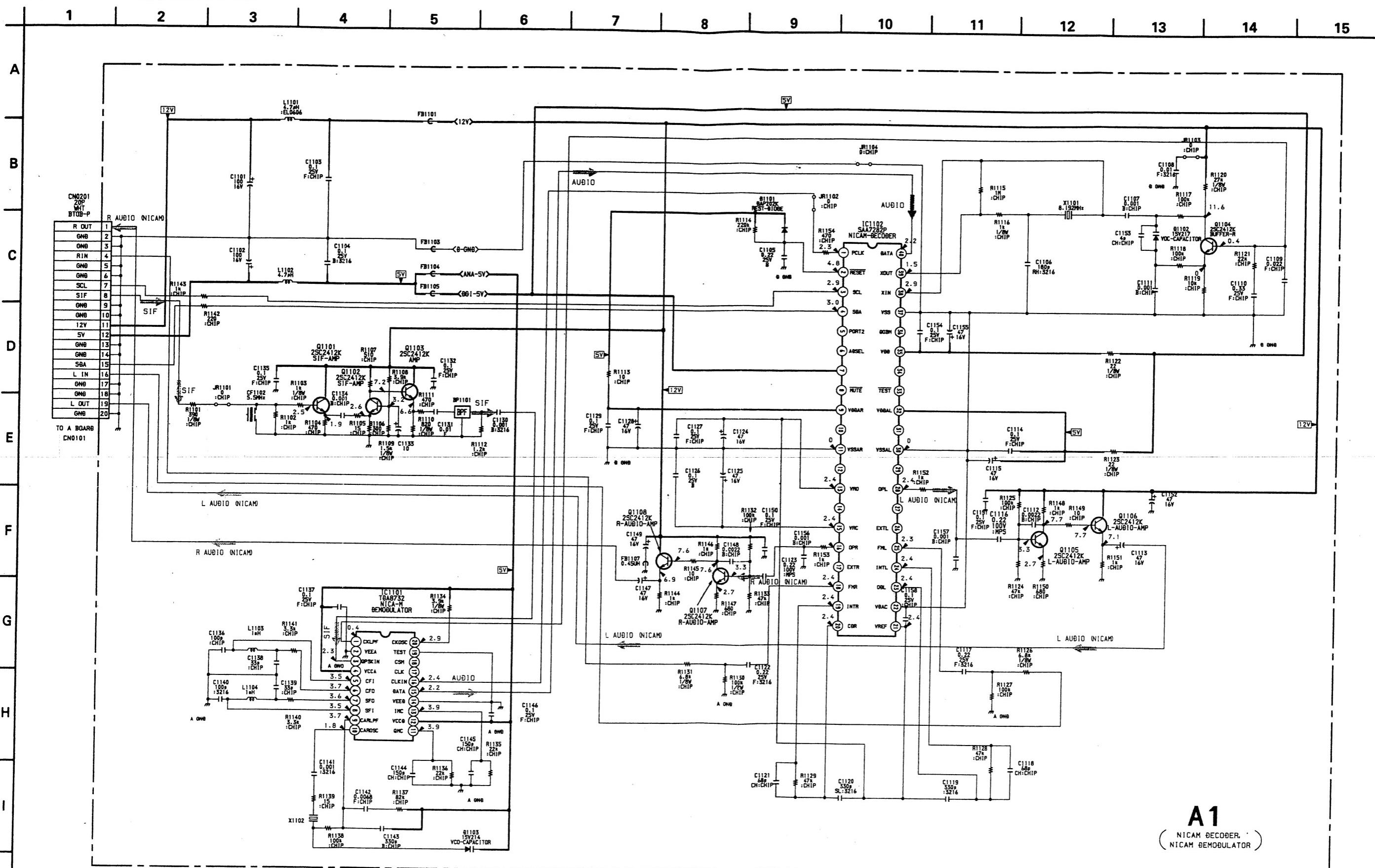
**- P Board (Component Side) -**



-38-

-  : Pattern from the side which enables seeing.
  -  : Pattern of the rear side.

## (11) Schematic Diagram of A1 Board

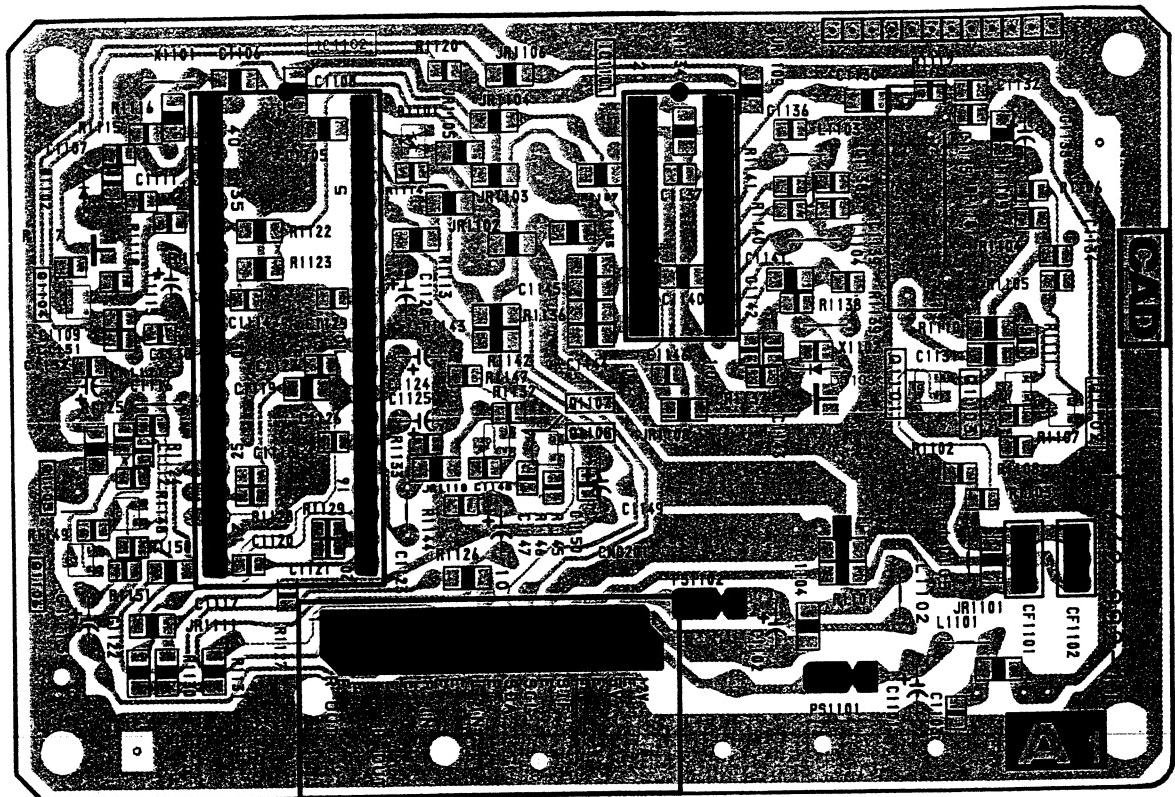


A1  
NICAM DECODER,  
NICAM DEMODULATOR

A<sub>1</sub>

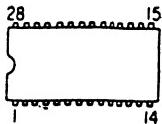
[ NICAM DECODER,  
NICAM DEMODULATOR ]

- A1 Board -

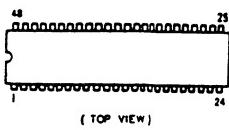


#### 5-4. SEMICONDUCTORS

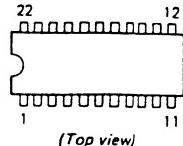
CXA1268P  
M27C512-20B1-AE21  
SDA5231-2  
SDA9087XGEG  
SDA9089XGEG  
TDA6612



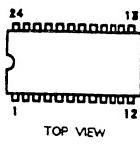
CXA1545AS  
CXA1587S



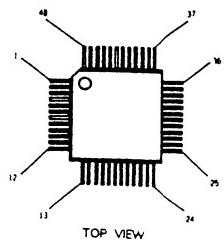
CXA1656S



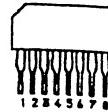
CXD1050A-15P  
TDA8443A/C4  
TDA9145



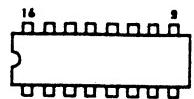
CXD2018Q



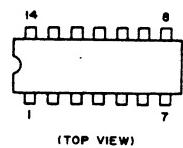
CX-7948A  
M5220L  
 $\mu$ PC1498H



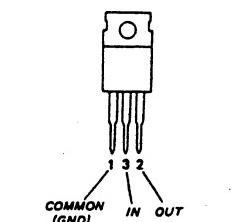
CXA1315P  
IR3M02  
MC14053BCP  
 $\mu$ PD4053BC



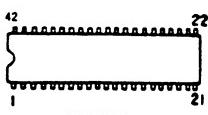
LM324N  
MB3614



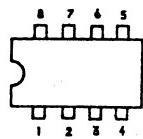
NJM79M05FA  
NJM7915FA  
RC79M05FA



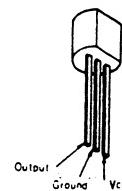
PA0036



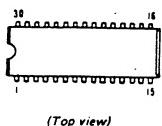
LM393P  
SDA9086-3  
TDA2822M  
TEA2114  
TL082CP  
 $\mu$ PC393C  
 $\mu$ PC4082C  
 $\mu$ PC4558C  
X24C16S



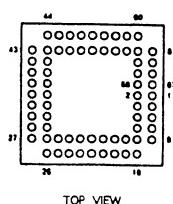
RC78L05A  
TA78L005AP



SBX1692-01



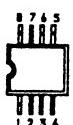
SDA30C162



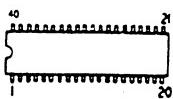
L78M05  
MC7809CT  
NJM78M05FA  
RC78M05FA  
NJM7815FA  
RC7805FA  
RC7809FA  
RC7812FA  
RC7815FA  
 $\mu$ PC7812H



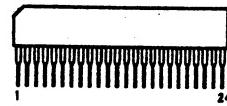
LM358D  
LM358DR-E1



SAA7282P  
SDA5248C1



STK-4278L



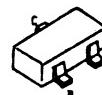
DTC144ES



2SA1013-O  
2SA1091-O  
2SA1208-S  
2SC2551-O  
2SD788-5



DTA124EK  
DTA144EK  
DTC114EK  
DTC124EK  
DTC144EK  
2SA1037K  
2SA1162-G  
2SC2412K  
2SC1623-L5L6  
2SC2413K-Q



2SA1010-M  
2SA1261-K  
2SB861-C  
2SB1015  
2SB1094-LK  
2SC3675  
2SD1138-C  
2SD1406-YGR



2SA1309A-Q  
2SA1175-HFE  
2SC2785-HFE  
2SC3311A-QRS



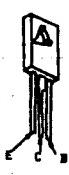
2SA1301-O



2SA1306A-Y  
2SC3298A-Y  
2SC3298B-Y



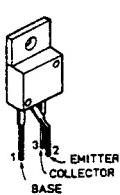
2SB649A-C  
2SC2688-LK  
2SC2688-LK  
2SC3271-N  
2SC3271-P



2SB734-34  
2SC3733



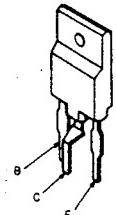
2SC4256CB  
2SC4632-CB7



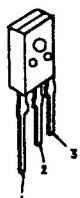
2SD2012



2SD1887-CA



D10SC6MR



DAN202K  
MA152WK



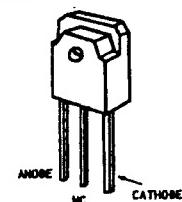
DA204K  
1SS226



DAP202K  
1S2836



DD50R

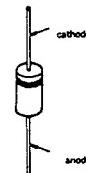


ECP10G  
MTZJ-13B  
MTZJ-13C  
MTZJ-3.9A  
MTZJ-3.9B  
MTZJ-33C  
MTZJ-39B  
MTZJ-5.1A  
MTZJ-5.1B  
MTZJ-5.6B  
MTZJ-9.1  
MTZJ-7.5A  
MTZJ-11B  
MTZJ-18B  
MTZJ-24C  
RD18ES-B2  
RD2.0ES-B1  
RD27F-B2  
RD5.1ES-B2  
RD5.6ES-B2  
RD7.5ES-B2  
ISS119  
ISS133

ERC06-15S  
ERB81-004  
ERC81-004  
RU-1C  
RU-2AM  
RU-3AM  
S3V10SB

ERC38-08  
GP08D  
U05G  
V06C  
V09G  
V19E  
V30N

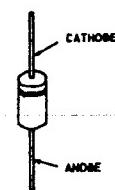
ERD28-08S



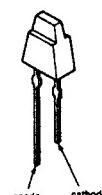
MA3056  
MA3056M  
RD5.6M-B2



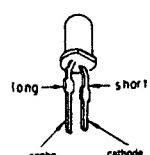
SB140



MTZJ-6.2A  
SLP361B



TLR124



## SECTION 6

### EXPLODED VIEWS

**NOTE:**

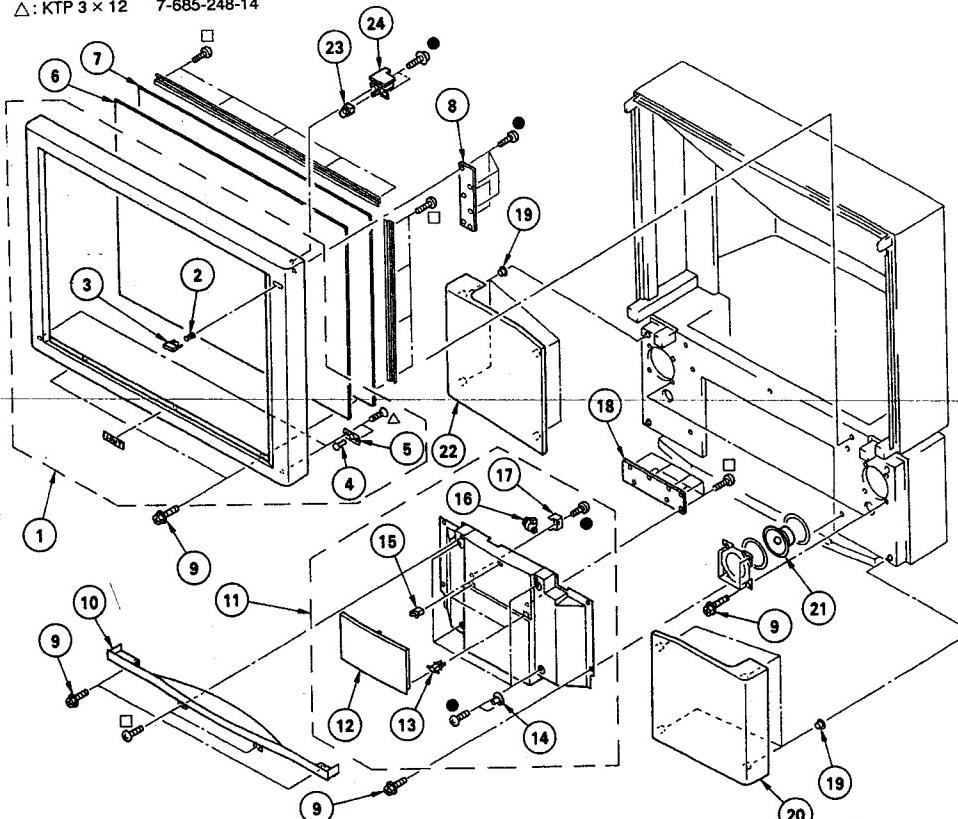
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a callout number in the remark column.

- Items marked "\*" are not stocked since they are seldom required for routine service.
- Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

#### 6-1. CONTROL PANEL

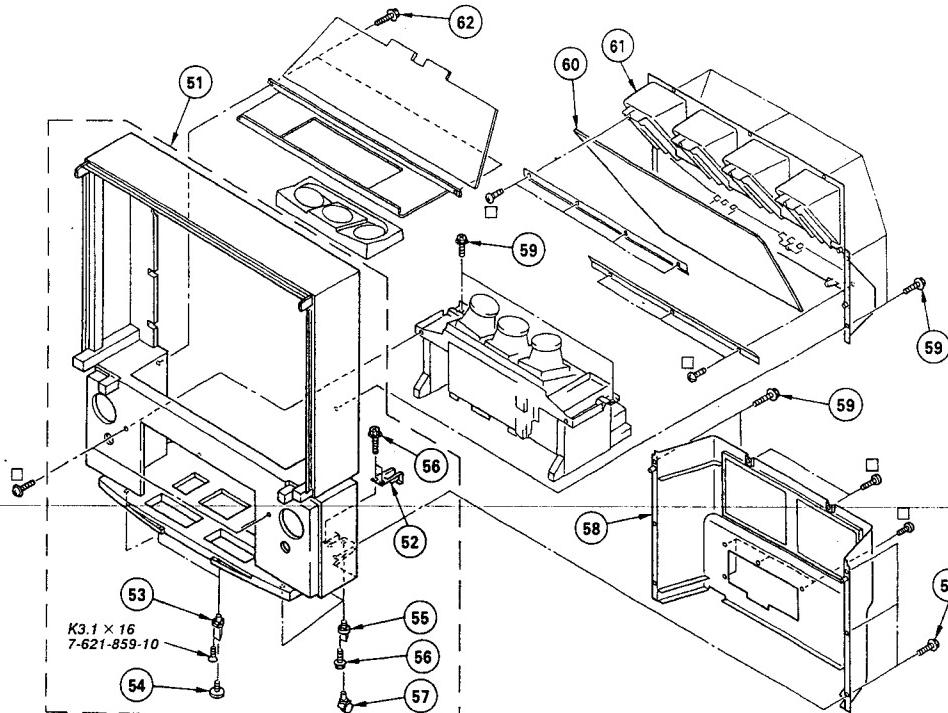
- : BVTP 3 x 12 7-685-648-79
- : BVTP 4 x 12 7-685-661-79
- $\Delta$ : KTP 3 x 12 7-685-248-14



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4030-609-1	FRAME ASSY, SCREEN		13	3-703-035-11	SHAFT, LID	
2	3-308-717-00	SPRING, COMPRESSION		14	4-843-806-00	STRIKE	
3	4-037-635-01	BUTTON, POWER		15	4-392-036-01	CATCHER, PUSH	
4	4-838-452-00	STRIKE		16	3-721-204-21	DAMPER	
5	4-838-453-00	SUPPORT		17	4-397-047-01	HOLDER, DAMPER	
6	4-037-360-11	PLATE (L), DIFFUSION		18	*1-644-711-11	H2 BOARD	
7	4-037-359-11	PLATE (R), DIFFUSION		19	4-838-438-00	LATCH	
8	*1-644-710-11	H1 BOARD		20	X-4030-569-1	GRILLE (R) ASSY, SPEAKER	
9	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD		21	1-504-145-11	SPEAKER (12CM)	
10	*4-037-620-01	SCUTCHON, FRONT, FINAL		22	X-4030-570-1	GRILLE (L) ASSY, SPEAKER	
11	*X-4030-605-01	FACE ASSY, CONTROL		23	*4-037-636-01	ADJUST. BUTTON	
12	4-037-632-01	LID, FINAL CONTROL		24	*1-644-712-11	H3 BOARD	

#### 6-2. CABINET

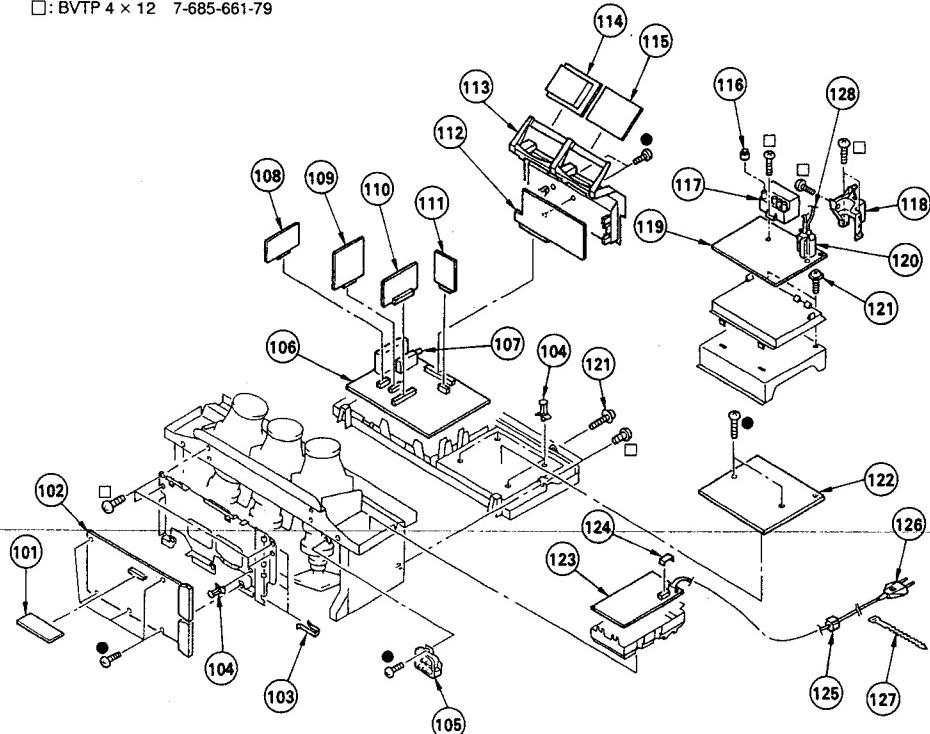
- : BVTP 4 x 12 7-685-661-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4030-603-1	CABINET ASSY		52-57	4-032-343-11	CASTER	
52	4-037-639-01	BRACKET, AC CORD		58	X-4030-604-1	COVER ASSY, BACK	
53	4-037-473-01	NUT, FITTING		59	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
54	4-037-472-01	LEG, ADJUSTABLE		60	4-037-534-01	MIRROR (45°), REFLECTION	
55	4-030-850-01	SOCKET, CASTER		61	4-036-462-01	COVR (45°), MIRROR	
56	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD		62	4-378-522-21	SCREW, TAPPING, HEXAGON HEAD	

## 6-3. CHASSIS

●: BVTP 3 × 12 7-685-648-79  
 □: BVTP 4 × 12 7-685-661-79

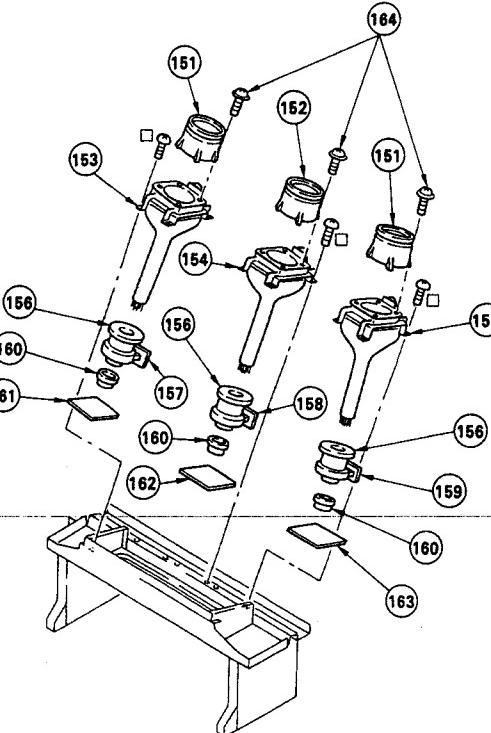


The components identified by shading and mark  $\Delta$  are critical for safety.  
 Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
101	*I-644-278-12	DS BOARD	
102	*A-1341-579-A	D BOARD, COMPLETE	
103	*4-393-401-01	SPRING	
104	*3-670-570-21	SPACER, SUPPORT	
105	$\Delta$ -I-241-744-11	RESISTOR ASSY (HIGH-VOLTAGE)	
106	*A-1296-987-A	A BOARD, COMPLETE	
107	$\Delta$ -I-693-185-11	TUNER (UW916H)	
108	*A-1630-111-A	A1 BOARD, COMPLETE	
109	*A-1342-193-A	VM BOARD, COMPLETE	
110	$\Delta$ -I-131-046-A	B1 BOARD, COMPLETE	
111	$\Delta$ -I-131-046-A	C BOARD, COMPLETE	
112	*A-1388-158-A	J BOARD, COMPLETE	
113	*4-037-620-01	BRACKET, J	
114	*A-1645-024-A	V BOARD, COMPLETE	

## 6-4. PICTURE TUBE

□: BVTP 4 × 12 7-685-661-79



The components identified by shading and mark  $\Delta$  are critical for safety.  
 Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
115	*A-1622-005-A	P BOARD, COMPLETE	
116	4-373-137-01	CAP (Z), RUBBER	
117	$\Delta$ -I-453-108-11	DC BLOCK, HIGH-VOLTAGE	
118	4-034-482-01	COVER, FBT	
119	*A-1390-305-A	N BOARD, COMPLETE	
120	$\Delta$ -I-453-121-11	TRANSFORMER ASSY, FLYBACK (NX-2630B4)	
121	3-701-810-91	SCREW, TERMINAL	
122	*A-1316-137-A	G BOARD, COMPLETE	
123	*A-1241-083-A	F BOARD, COMPLETE	
124	*4-031-031-01	cap, fuse	
125	$\Delta$ -I-389-201-11	HOLDER, AC CORD	
126	*I-590-501-11	CORD, POWER (WITH NOISE FILTER)	
127	3-701-007-00	BAND, BINDING	
128	I-574-590-31	LEAD ASSY, HIGH-VOLTAGE	
151	4-034-057-01	LENS (LINNIT)	
152	4-034-057-11	LENS (LINNIT)	
153	$\Delta$ -I-736-633-05	PICTURE TUBE (SD-249 (R))	
154	$\Delta$ -I-736-631-05	PICTURE TUBE (SD-249 (G))	
155	$\Delta$ -I-736-632-05	PICTURE TUBE (SD-249 (B))	
156	$\Delta$ -I-451-396-21	DEFLECTION YOKE (Y936PA)	
157	*I-644-717-11	ZR BOARD	
158	*I-644-718-11	ZG BOARD	
159	*I-644-719-11	ZB BOARD	
160	$\Delta$ -I-452-443-13	NECK ASSY, PICTURE TUBE (NA367)	
161	*A-1331-228-A	CR BOARD, COMPLETE	
162	*A-1331-229-A	CG BOARD, COMPLETE	
163	*A-1331-230-A	CB BOARD, COMPLETE	
164	3-701-810-91	SCREW, TERMINAL	

## **SECTION 7**

### **ELECTRICAL PARTS LIST**

B-1

B1

F

NOT

The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## RESISTORS

- All resistors are in ohms
  - F : nonflammable

REF. NO. PART NO. DESCRIPTION

REMARK	REF. NO.	PART NO.	DESCRIPTION
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**REMARK**

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The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK				
R1332	1-216-069-00	METAL GLAZE	6.8K 5%	1/10W	*A-1296-987-A	A BOARD, COMPLETE	*****				
R1333	1-216-067-00	METAL GLAZE	5.6K 5%	1/10W							
R1334	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W							
R1341	1-216-089-00	METAL GLAZE	47K 5%	1/10W	4-200-001-01	HOLDER, IC					
R1342	1-216-073-00	METAL GLAZE	10K 5%	1/10W	4-201-023-01	SPACER, INSULATING					
R1343	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	*4-341-751-01	EYELET (EY16-EY59)					
R1344	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W	*4-341-752-01	EYELET (EY30-EY40)					
*****											
*A-1241-083-A	F BOARD, COMPLETE		*****	4-363-414-00	SPACER, MICA						
*****											
*4-341-751-01	EYELET (EY1812-EY1827)			*4-368-683-01	SPRING, TRANSISTOR						
*4-341-752-01	EYELET (EY1801-EY1811, EY1828-EY1831)			4-382-854-11	SCREW (M3X10), P, SW (+)						
*****											
<CAPACITOR>											
<CAPACITOR>											
C1802Δ	I-161-953-81	CERAMIC	0.0047MF	20%	400V	C071	1-124-120-11	ELECT	220MF	20%	16V
C1803Δ	I-161-953-81	CERAMIC	0.0047MF	20%	400V	C072	1-124-120-11	ELECT	220MF	20%	16V
C1804Δ	I-125-483-11	ELECT(BLOCK)	470MF	20%	400V	C073	1-163-125-20	CERAMIC CHIP	220PF	5%	50V
C1805	I-162-559-12	CERAMIC	0.0047MF	20%	400V	C074	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C1807Δ	I-162-578-51	CERAMIC	0.0047MF	20%	400V	C102	1-126-103-11	ELECT	470MF	20%	16V
C1816Δ	I-126-519-11	FILM	0.47MF	20%	300V	C103	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1817Δ	I-136-519-11	FILM	0.47MF	20%	300V	C104	1-124-910-11	ELECT	47MF	20%	50V
C1820Δ	I-161-953-81	CERAMIC	0.0047MF	20%	400V	C105	1-126-233-11	ELECT	22MF	20%	50V
C1821	I-161-953-81	CERAMIC	0.0047MF	20%	400V	C106	1-124-927-11	ELECT	4.7MF	20%	50V
<CONNECTOR>											
CN1829*	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			C110	1-124-122-11	ELECT	100MF	20%	25V	
CN1850*	1-568-878-51	PIN, CONNECTOR 3P			C111	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
CN1851*	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			C120	1-163-031-11	CERAMIC CHIP	0.01MF		50V	
CN1857*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			C201	1-137-373-91	FILM	0.033MF	5%	50V	
CN1858*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			C202	1-137-373-91	FILM	0.033MF	5%	50V	
CN1859*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			C203	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
CN1860*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			C204	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
<DIODE>											
D1801Δ	8-719-503-06	DIODE S3WB60Z			C205	1-124-907-11	ELECT	10MF	20%	50V	
D1803	8-719-911-19	DIODE 1S5119			C206	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
<DIODE>											
C207	1-137-613-11	FILM	0.0018MF	2%	C208	1-164-005-11	CERAMIC CHIP	0.47MF		100V	
<DIODE>											
C209	1-164-005-11	CERAMIC CHIP	0.47MF		C209	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C210	1-164-005-11	CERAMIC CHIP	0.47MF		C210	1-164-005-11	CERAMIC CHIP	0.47MF		25V	
C211	1-164-004-11	CERAMIC CHIP	0.1MF		C211	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C213	1-163-023-00	CERAMIC CHIP	0.015MF		C213	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V	
C214	1-163-023-00	CERAMIC CHIP	0.015MF		C214	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V	
<DIODE>											
C215	1-163-809-11	CERAMIC CHIP	0.047MF		C215	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C216	1-163-809-11	CERAMIC CHIP	0.047MF		C216	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C217	1-124-925-11	ELECT	2.2MF		C217	1-124-925-11	ELECT	2.2MF	20%	50V	
C218	1-124-925-11	ELECT	2.2MF		C218	1-124-925-11	ELECT	2.2MF	20%	50V	
C219	1-163-011-11	CERAMIC CHIP	0.0015MF		C219	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V	
<DIODE>											
C220	1-163-011-11	CERAMIC CHIP	0.0015MF		C220	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V	
C221	1-124-925-11	ELECT	2.2MF		C221	1-124-925-11	ELECT	2.2MF	20%	50V	
C222	1-124-925-11	ELECT	2.2MF		C222	1-124-925-11	ELECT	2.2MF	20%	50V	
C223	1-137-198-81	FILM	1MF		C223	1-137-198-81	FILM	1MF	5%	50V	
C224	1-137-198-81	FILM	1MF		C224	1-137-198-81	FILM	1MF	5%	50V	
<TRANSFORMER>											
LF1801Δ	I-424-436-11	TRANSFORMER, LINE FILTER			C225	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V	
LF1802Δ	I-424-436-11	TRANSFORMER, LINE FILTER			C226	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	
<RESISTOR>											
R1801Δ	I-260-132-91	CARBON	560K 5%	1/2W	C227	1-124-907-11	ELECT	10MF	20%	50V	
R1803	I-249-377-11	CARBON	0.47 5%	1/4W	C228	1-124-907-11	ELECT	10MF	20%	50V	
R1804Δ	I-205-790-11	WIREMOUND	5.6 5%	2W	C229	1-126-101-11	ELECT	100MF	20%	16V	
R1808Δ	I-244-945-91	CARBON	1M 5%	1/2W	C230	1-126-101-11	ELECT	100MF	20%	16V	
R1809	I-218-265-11	METAL GLAZE	8.2M 5%	1W	C231	1-164-346-11	CERAMIC CHIP	1MF		16V	
<RELAY>											
RY1801Δ	I-515-805-11	RELAY, POWER			C232	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
*****											
C233	1-163-009-11	CERAMIC CHIP	0.001MF		C234	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
<RELAY>											
RY1801Δ	I-515-805-11	RELAY, POWER			C235	1-137-134-91	FILM	0.22MF	5%	63V	
*****											
C236	1-124-618-11	ELECT	2200MF	20%	C236	1-124-618-11	ELECT	2200MF	20%	35V	
C237	1-124-618-11	ELECT	2200MF	20%	C237	1-124-618-11	ELECT	2200MF	20%	35V	
C238	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	C238	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	

A

The components identified by shading and mark are critical for safety.  
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK								
C239	I-137-134-91	FILM	0.22MF	5%	63V	C427	I-164-346-11	CERAMIC CHIP 1MF	16V						
C240	I-126-233-11	ELECT	22MF	20%	50V	C428	I-164-346-11	CERAMIC CHIP 1MF	16V						
C241	I-126-233-11	ELECT	22MF	20%	50V	C429	I-124-119-00	ELECT	330MF	20%	16V				
C242	I-124-903-11	ELECT	1MF	20%	50V	C501	I-126-103-11	ELECT	470MF	20%	16V				
C243	I-163-119-00	CERAMIC CHIP 120PF	5%	50V	C502	I-124-902-00	ELECT	0.47MF	20%	50V					
				C503	I-130-487-00	NYLAR	0.022MF	5%	50V						
C244	I-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	C504	I-163-031-11	CERAMIC CHIP 0.01MF	5%	50V						
C251	I-126-320-11	ELECT	10MF	20%	16V	C505	I-108-700-11	NYLAR	0.047MF	10%	200V				
C301	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C506	I-102-973-00	CERAMIC	100PF	5%	50V						
C302	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C508	I-102-030-00	CERAMIC	330PF	10%	500V						
C303	I-164-346-11	CERAMIC CHIP 1MF	16V	C509	I-102-030-00	CERAMIC	330PF	10%	500V						
C304	I-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C510	I-136-565-11	FILM	0.015MF	3%	1.4KV					
C305	I-163-097-00	CERAMIC CHIP 15PF	5%	50V	C514	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C515	I-163-031-11	CERAMIC CHIP 0.01MF	50V			
C306	I-163-097-00	CERAMIC CHIP 15PF	5%	50V	C516	I-124-907-11	ELECT	10MF	20%	50V					
C307	I-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	C517	I-124-477-11	ELECT	47MF	20%	16V					
C308	I-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	C518	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C519	I-163-031-11	CERAMIC CHIP 0.01MF	50V			
C309	I-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C520	I-126-233-11	ELECT	22MF	20%	50V					
C310	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C522	I-123-024-11	ELECT	33MF	160V	C523	I-108-700-11	NYLAR	0.047MF	10%	200V	
C311	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C524	I-124-477-11	ELECT	47MF	20%	16V					
C312	I-124-910-11	ELECT	47MF	20%	50V	C525	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C526	I-163-031-11	CERAMIC CHIP 0.01MF	50V		
C313	I-163-077-00	CERAMIC CHIP 0.1MF	50V	C528	I-124-662-11	ELECT	220MF	20%	50V						
C314	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C529	I-124-907-11	ELECT	10MF	20%	50V						
C315	I-124-910-11	ELECT	47MF	20%	50V	C530	I-164-299-11	CERAMIC CHIP 0.22MF	10%	25V					
C316	I-163-077-00	CERAMIC CHIP 0.1MF	50V	C531	I-164-299-11	CERAMIC CHIP 0.22MF	10%	25V	C532	I-163-125-00	CERAMIC CHIP 220PF	5%	50V		
C317	I-163-103-00	CERAMIC CHIP 22PF	5%	50V	C536	I-124-662-11	ELECT	220MF	20%	50V					
C318	I-163-103-00	CERAMIC CHIP 22PF	5%	50V	C537	I-124-662-11	ELECT	220MF	20%	50V					
C319	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C538	I-124-907-11	ELECT	10MF	20%	50V						
C320	I-124-910-11	ELECT	47MF	20%	50V	C539	I-123-935-00	ELECT	33MF	20%	160V				
C321	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C542	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C543	I-163-031-11	CERAMIC CHIP 0.01MF	50V				
C322	I-126-233-11	ELECT	22MF	20%	50V	C544	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C545	I-163-031-11	CERAMIC CHIP 0.01MF	50V		
C323	I-163-139-00	CERAMIC CHIP 560PF	5%	50V	C546	I-102-030-00	CERAMIC	330PF	10%	500V					
C324	I-124-910-11	ELECT	47MF	20%	50V	C547	I-123-935-00	ELECT	33MF	20%	160V				
C341	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C548	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C549	I-163-031-11	CERAMIC CHIP 0.01MF	50V			
C342	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C550	I-124-910-11	ELECT	47MF	20%	50V					
C343	I-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C551	I-123-935-00	ELECT	33MF	20%	160V					
C344	I-162-638-11	CERAMIC CHIP 1MF	16V	C552	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C553	I-163-125-00	CERAMIC CHIP 220PF	5%	50V			
C345	I-162-638-11	CERAMIC CHIP 1MF	16V	C554	I-124-662-11	ELECT	220MF	20%	50V						
C347	I-162-638-11	CERAMIC CHIP 1MF	16V	C555	I-102-030-00	CERAMIC	330PF	10%	500V						
C348	I-162-638-11	CERAMIC CHIP 1MF	16V	C556	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C557	I-124-910-11	ELECT	47MF	20%	50V		
C349	I-162-638-11	CERAMIC CHIP 1MF	16V	C558	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C559	I-124-910-11	ELECT	47MF	20%	50V		
C350	I-124-907-11	ELECT	10MF	20%	50V	C560	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C561	I-123-935-00	ELECT	33MF	20%	160V
C351	I-124-234-00	ELECT	22MF	20%	16V	C574	I-163-117-00	CERAMIC CHIP 100PF	5%	50V					
C352	I-162-638-11	CERAMIC CHIP 1MF	16V	C577	I-163-031-00	CERAMIC CHIP 10FF	5%	50V	C578	I-163-031-11	CERAMIC CHIP 0.01MF	50V			
C354	I-162-638-11	CERAMIC CHIP 1MF	16V	C579	I-124-910-11	ELECT	47MF	20%	50V						
C355	I-162-638-11	CERAMIC CHIP 1MF	16V	C580	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C581	I-163-031-11	CERAMIC CHIP 0.01MF	50V				
C356	I-162-638-11	CERAMIC CHIP 0.22MF	10%	25V	C582	I-126-233-11	ELECT	22MF	20%	50V					
C357	I-164-299-11	CERAMIC CHIP 0.22MF	10%	25V	C583	I-163-121-00	CERAMIC CHIP 150PF	5%	50V						
C358	I-164-299-11	CERAMIC CHIP 0.22MF	10%	25V	C584	I-163-063-00	CERAMIC CHIP 0.022MF	10%	50V						
C359	I-124-907-11	ELECT	10MF	20%	50V	C585	I-124-903-11	ELECT	1MF	20%	50V				
C361	I-163-101-00	CERAMIC CHIP 22PF	5%	50V	C588	I-164-346-11	CERAMIC CHIP 1MF	16V	C589	I-126-233-11	ELECT	22MF	20%	50V	
C362	I-137-134-91	FILM	0.22MF	5%	63V	C590	I-126-233-11	ELECT	22MF	20%	50V				
C363	I-124-907-11	ELECT	10MF	20%	50V	C591	I-124-925-11	ELECT	2.2MF	20%	50V				
C365	I-124-120-11	ELECT	220MF	20%	16V	C592	I-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V					
C366	I-124-903-11	ELECT	1MF	20%	50V	C593	I-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V					
C401	I-164-005-11	CERAMIC CHIP 0.47MF	16V	C595	I-163-117-00	CERAMIC CHIP 100PF	5%	50V							
C402	I-124-917-11	ELECT	33MF	20%	50V	C596	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V					
C403	I-164-005-11	CERAMIC CHIP 0.47MF	16V	C600	I-124-122-11	ELECT	100MF	20%	16V						
C411	I-164-005-11	CERAMIC CHIP 0.47MF	25V	C601	I-126-101-11	ELECT	100MF	20%	16V						
C412	I-164-005-11	CERAMIC CHIP 0.47MF	25V	C602	I-124-478-11	ELECT	100MF	20%	16V						
C421	I-124-910-11	ELECT	47MF	20%	50V	C604	I-124-122-11	ELECT	100MF	20%	16V				
C422	I-124-910-11	ELECT	47MF	20%	50V	C605	I-126-233-11	ELECT	22MF	20%	50V				
C423	I-137-047-11	FILM	0.01MF	10%	400V	C606	I-126-233-11	ELECT	22MF	20%	50V				
C424	I-163-129-00	CERAMIC CHIP 330PF	5%	50V	C607	I-126-233-11	ELECT	22MF	20%	50V					
C425	I-163-129-00	CERAMIC CHIP 330PF	5%	50V	C608	I-126-233-11	ELECT	22MF	20%	50V					
C426	I-124-910-11	ELECT	47MF	20%	50V	C609	I-126-233-11	ELECT	22MF	20%	50V				

&lt;FILTER&gt;

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK															
C427	I-164-346-11	CERAMIC CHIP 1MF	16V	C428	I-164-346-11	CERAMIC CHIP 1MF	16V															
C429	I-124-119-00	ELECT	330MF	C501	I-126-103-11	ELECT	470MF	20%	16V													
C502	I-124-902-00	ELECT	0.47MF	C503	I-130-487-00	NYLAR	0.022MF	5%	50V													
C504	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C505	I-108-700-11	NYLAR	0.047MF	10%	200V													
C506	I-124-598-11	FILM	3MF	C507	I-102-973-00	CERAMIC	100PF	5%	50V													
C508	I-102-973-00	CERAMIC	100PF	C509	I-102-030-00	CERAMIC	330PF	10%	500V													
C510	I-136-565-11	FILM	0.015MF	C511	I-124-907-11	ELECT	10MF	20%	50V													
C512	I-124-477-11	ELECT	10MF	C513	I-124-477-11	ELECT	47MF	20%	16V													
C514	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C515	I-124-907-11	ELECT	10MF	20%	50V													
C516	I-124-907-11	ELECT	10MF	C517	I-124-907-11	ELECT	47MF	20%	16V													
C518	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C519	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C520	I-126-233-11	ELECT	22MF	20%	50V									
C521	I-124-907-11	ELECT	22MF	C522	I-123-024-11	ELECT	33MF	160V	C523	I-108-700-11	NYLAR	0.047MF	10%	200V								
C524	I-124-477-11	ELECT	47MF	C525	I-124-477-11	ELECT	47MF	20%	C526	I-163-031-11	CERAMIC CHIP 0.01MF	50V										
C526	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C527	I-124-907-11	ELECT	10MF	20%	C528	I-163-031-11	CERAMIC CHIP 0.01MF	50V										
C529	I-124-907-11	ELECT	10MF	C530	I-124-907-11	ELECT	47MF	20%	C531	I-164-299-11	CERAMIC CHIP 0.22MF	10%	C532	I-163-125-00	CERAMIC CHIP 220PF	5%	C533	I-163-031-11	CERAMIC CHIP 0.01MF	50V		
C534	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C535	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C536	I-163-031-11	CERAMIC CHIP 0.01MF	50V											
C537	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C538	I-124-903-11	ELECT	1MF	20%	C539	I-124-903-11	ELECT	2.2MF	20%	C540	I-123-935-00	ELECT	33MF	20%	C541	I-163-031-11	CERAMIC CHIP 0.01MF	50V
C542	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C543	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C544	I-163-031-11	CERAMIC CHIP 0.01MF	50V											
C545	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C546	I-123-935-00	ELECT	33MF	20%	C547	I-163-031-11	CERAMIC CHIP 0.01MF	50V										
C547	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C548	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C549	I-163-031-11	CERAMIC CHIP 0.01MF	50V											
C549	I-163-031-11	CER																				

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

**A****A**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L444	1-410-476-11	INDUCTOR 33UH		Q581	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR57	1-216-295-00	METAL GLAZE 0 5% 1/10W		R211	I-247-739-11	CARBON 100 5% 1/2W	
L501	1-460-196-11	COIL, HORIZONTAL LINEARITY		Q582	8-729-216-22	TRANSISTOR 2SA1162-G		JR58	1-216-295-00	METAL GLAZE 0 5% 1/8W		R212	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
L502	1-410-645-31	INDUCTOR 100UH		Q610	8-729-140-97	TRANSISTOR 2SB734-34		JR59	1-216-295-00	METAL GLAZE 0 5% 1/10W		R213	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
L503	1-408-420-00	INDUCTOR 82UH		Q611	8-729-900-53	TRANSISTOR DTC114EK		JR60	1-216-295-00	METAL GLAZE 0 5% 1/10W		R214	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
L504	1-412-546-21	INDUCTOR 560UH		Q612	8-729-216-22	TRANSISTOR 2SA1162-G		JR61	1-216-295-00	METAL GLAZE 0 5% 1/10W		R215	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
L505	1-459-313-00	COIL WITH CORE (HWC)						JR62	1-216-295-00	METAL GLAZE 0 5% 1/8W		R216	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
L507	1-459-313-00	COIL WITH CORE (HWC)						JR63	1-216-295-00	METAL GLAZE 0 5% 1/8W		R217	I-216-043-00	METAL GLAZE 560 5% 1/10W	
L508	1-412-546-21	INDUCTOR 560UH						JR64	1-216-295-00	METAL GLAZE 0 5% 1/10W		R218	I-216-081-00	METAL GLAZE 22K 5% 1/10W	
L610	1-412-539-21	INDUCTOR 150UH						JR65	1-216-295-00	METAL GLAZE 0 5% 1/8W		R221	I-212-849-00	FUSIBLE 4.7 5% 1/4W F	
L611	1-412-539-21	INDUCTOR 150UH						JR66	1-216-295-00	METAL GLAZE 0 5% 1/10W		R222	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
								JR67	1-216-295-00	METAL GLAZE 0 5% 1/8W		R223	I-216-043-00	METAL GLAZE 560 5% 1/10W	
								JR68	1-216-295-00	METAL GLAZE 0 5% 1/8W		R224	I-216-081-00	METAL GLAZE 22K 5% 1/10W	
								JR69	1-216-295-00	METAL GLAZE 0 5% 1/8W		R225	I-212-849-00	FUSIBLE 4.7 5% 1/4W F	
								JR70	1-216-295-00	METAL GLAZE 0 5% 1/8W		R226	I-216-039-00	METAL GLAZE 390 5% 1/10W	
								JR71	1-216-295-00	METAL GLAZE 0 5% 1/8W		R227	I-216-081-00	METAL GLAZE 22K 5% 1/10W	
												R228	I-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q071	8-729-901-05	TRANSISTOR DTA124EK		JR6	1-216-295-00	METAL GLAZE 0 5% 1/10W						R229	I-216-039-00	METAL GLAZE 390 5% 1/10W	
Q101	8-729-216-22	TRANSISTOR 2SA1162-G		JR7	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR72	1-216-295-00	METAL GLAZE 0 5% 1/10W		R230	I-216-097-00	METAL GLAZE 10K 5% 1/10W	
Q102	8-729-901-00	TRANSISTOR DTC124EK		JR8	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR73	1-216-295-00	METAL GLAZE 0 5% 1/8W		R231	I-216-097-00	METAL GLAZE 100K 5% 1/10W	
Q103	8-729-901-06	TRANSISTOR DTA144EK		JR9	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR74	1-216-295-00	METAL GLAZE 0 5% 1/8W		R232	I-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR10	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR75	1-216-295-00	METAL GLAZE 0 5% 1/8W		R233	I-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR11	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR77	1-216-295-00	METAL GLAZE 0 5% 1/10W		R234	I-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
Q203	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR12	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR78	1-216-295-00	METAL GLAZE 0 5% 1/8W		R235	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q204	8-729-216-22	TRANSISTOR 2SA1162-G		JR13	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR79	1-216-295-00	METAL GLAZE 0 5% 1/8W		R236	I-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G		JR14	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR80	1-216-295-00	METAL GLAZE 0 5% 1/8W		R237	I-216-025-00	METAL GLAZE 100 5% 1/10W	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G		JR15	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR81	1-216-295-00	METAL GLAZE 0 5% 1/8W		R238	I-216-025-00	METAL GLAZE 100 5% 1/10W	
Q207	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR16	1-216-295-00	METAL GLAZE 0 5% 1/8W						R239	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q209	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR17	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR82	1-216-295-00	METAL GLAZE 0 5% 1/8W		R240	I-216-089-00	METAL GLAZE 47K 5% 1/10W	
Q301	8-729-901-00	TRANSISTOR DTC124EK		JR18	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR83	1-216-295-00	METAL GLAZE 0 5% 1/10W		R241	I-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
Q302	8-729-216-22	TRANSISTOR 2SA1162-G		JR19	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR84	1-216-295-00	METAL GLAZE 0 5% 1/10W		R242	I-216-218-00	METAL GLAZE 6.8K 5% 1/8W	
Q303	8-729-216-22	TRANSISTOR 2SA1162-G		JR20	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR85	1-216-295-00	METAL GLAZE 0 5% 1/10W		R243	I-216-091-00	METAL GLAZE 56K 5% 1/10W	
Q304	8-729-900-53	TRANSISTOR DTC114EK		JR21	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR87	1-216-295-00	METAL GLAZE 0 5% 1/10W		R244	I-216-089-00	METAL GLAZE 47K 5% 1/10W	
Q305	8-729-901-01	TRANSISTOR DTC144EK		JR22	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR88	1-216-295-00	METAL GLAZE 0 5% 1/8W		R245	I-216-089-00	METAL GLAZE 47K 5% 1/10W	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G		JR23	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR89	1-216-295-00	METAL GLAZE 0 5% 1/10W		R247	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q308	8-729-216-22	TRANSISTOR 2SA1162-G		JR24	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR90	1-216-295-00	METAL GLAZE 0 5% 1/8W		R248	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q309	8-729-931-02	TRANSISTOR 2SC2413K-Q		JR25	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR91	1-216-295-00	METAL GLAZE 0 5% 1/10W		R249	I-216-045-00	METAL GLAZE 680 5% 1/10W	
Q310	8-729-901-00	TRANSISTOR DTC124EK		JR26	1-216-295-00	METAL GLAZE 0 5% 1/8W						R250	I-216-095-00	METAL GLAZE 82K 5% 1/10W	
Q311	8-729-901-06	TRANSISTOR DTA144EK		JR27	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR92	1-216-295-00	METAL GLAZE 0 5% 1/8W		R251	I-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q312	8-729-900-53	TRANSISTOR DTC144EK		JR28	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR93	1-216-295-00	METAL GLAZE 0 5% 1/8W		R252	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q401	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR29	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR94	1-216-295-00	METAL GLAZE 0 5% 1/10W		R253	I-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR30	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR95	1-216-295-00	METAL GLAZE 0 5% 1/10W		R254	I-216-252-00	METAL GLAZE 180K 5% 1/8W	
Q403	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR31	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR96	1-216-295-00	METAL GLAZE 0 5% 1/8W		R255	I-216-252-00	METAL GLAZE 180K 5% 1/8W	
Q404	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR32	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR97	1-216-255-00	METAL GLAZE 0 2.2K 5% 1/10W		R256	I-216-182-00	METAL GLAZE 220 5% 1/8W	
Q444	8-729-216-22	TRANSISTOR 2SC1623-L5L6		JR33	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR98	1-216-255-00	METAL GLAZE 0 5% 1/10W		R257	I-216-182-00	METAL GLAZE 220 5% 1/8W	
Q445	8-729-216-22	TRANSISTOR 2SA1162-G		JR34	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR99	1-216-295-00	METAL GLAZE 0 5% 1/10W		R258	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q501	8-729-119-80	TRANSISTOR 2SC2688-LK		JR35	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR100	1-216-295-00	METAL GLAZE 0 5% 1/10W		R259	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q502	8-729-014-88	TRANSISTOR 2SC4891-CA		JR36	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR101	1-216-295-00	METAL GLAZE 0 5% 1/10W		R260	I-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q503	8-729-216-22	TRANSISTOR 2SA1162-G		JR38	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR102	1-216-295-00	METAL GLAZE 0 5% 1/10W					
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR39	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR104	1-216-198-00	METAL GLAZE 1K 5% 1/8W		R300	I-216-009-00	METAL GLAZE 22 5% 1/10W	
Q505	8-729-201-32	TRANSISTOR 2SA1013-0		JR40	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR105	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		R301	I-216-029-00	METAL GLAZE 150 5% 1/8W	
Q506	8-729-201-32	TRANSISTOR 2SA1013-0		JR41	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR106	1-216-057-00	METAL GLAZE 10K 5% 1/10W		R302	I-216-178-00	METAL GLAZE 150 5% 1/8W	
Q507	8-729-304-92	TRANSISTOR 2SB649A-C		JR42	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR107	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W		R303	I-216-174-00	METAL GLAZE 100 5% 1/8W	
Q508	8-729-204-16	TRANSISTOR 2SA1301-0		JR43	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR108	1-216-230-00	METAL GLAZE 22K 5% 1/8W		R304	I-216-174-00	METAL GLAZE 100 5% 1/8W	
Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR44	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR109	1-216-210-00	METAL GLAZE 3.3K 5% 1/8W		R305	I-216-035-00	METAL GLAZE 270 5% 1/10W	
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR45	1-216-295-00	METAL GLAZE 0 5% 1/10W		JR110	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W		R306	I-216-035-00	METAL GLAZE 270 5% 1/10W	
Q511	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR46	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR111	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W		R307	I-216-075-00	METAL GLAZE 12K 5% 1/10W	
Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR47	1-216-295-00	METAL GLAZE 0 5% 1/8W		JR112	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W		R308	I-216-121-00	METAL GLAZE 1M 5% 1/1	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R317	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R413	1-216-171-00	METAL GLAZE	75 5% 1/8W	R556	1-216-033-00	METAL GLAZE	220 5% 1/10W	R644	1-215-912-11	METAL OXIDE	150 5% 3W F
R319	1-216-029-00	METAL GLAZE	150 5% 1/10W	R414	1-216-171-00	METAL GLAZE	75 5% 1/8W	R558	1-249-385-11	CARBON	2.2 5% 1/4W F	R645	1-215-887-00	METAL OXIDE	150 5% 2W F
R320	1-216-174-00	METAL GLAZE	100 5% 1/8W	R416	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R563	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R646	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R321	1-216-039-00	METAL GLAZE	390 5% 1/10W	R417	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R564	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R645	1-215-912-11	METAL OXIDE	150 5% 3W F
R324	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R419	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R565	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W	R646	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R325	1-216-047-00	METAL GLAZE	820 5% 1/10W	R420	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R566	1-216-045-00	METAL GLAZE	680 5% 1/10W	R650	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R326	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R423	1-216-015-00	METAL GLAZE	39 5% 1/10W	R567	1-216-045-00	METAL GLAZE	680 5% 1/10W	R651	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R328	1-216-029-00	METAL GLAZE	150 5% 1/10W	R424	1-216-025-00	METAL GLAZE	100 5% 1/10W	R568	1-216-045-00	METAL GLAZE	680 5% 1/10W	R653	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R329	1-216-023-00	METAL GLAZE	82 5% 1/10W	R425	1-216-025-00	METAL GLAZE	100 5% 1/10W	R569	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W	R654	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R330	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R426	1-216-025-00	METAL GLAZE	100 5% 1/10W	R570	1-216-009-00	METAL GLAZE	22 5% 1/10W	R655	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R331	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R427	1-216-025-00	METAL GLAZE	100 5% 1/10W	R571	1-216-009-00	METAL GLAZE	22 5% 1/10W	R1520	1-249-429-11	CARBON	10K 5% 1/4W
R333	1-216-182-00	METAL GLAZE	220 5% 1/8W	R428	1-249-393-11	CARBON	10 5% 1/4W F	R572	1-216-049-00	METAL GLAZE	1K 5% 1/10W	<TRANSFORMER>			
R334	1-216-182-00	METAL GLAZE	220 5% 1/8W	R446	1-216-045-00	METAL GLAZE	680 5% 1/10W	R573	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R335	1-216-025-00	METAL GLAZE	100 5% 1/10W	R447	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R574	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R336	1-216-295-00	METAL GLAZE	0 5% 1/10W	R501	1-247-895-00	CARBON	470K 5% 1/4W	R575	1-216-037-00	METAL GLAZE	330 5% 1/10W	T501	1-439-545-11	TRANSFORMER, FERRITE	
R337	1-216-295-00	METAL GLAZE	0 5% 1/10W	R502	1-249-377-11	CARBON	0.47 5% 1/4W F	R576	1-216-025-00	METAL GLAZE	100 5% 1/10W	T502	1-437-078-11	TRANSFORMER, HORIZONTAL DRIVE	
R338	1-216-295-00	METAL GLAZE	0 5% 1/10W	R503	1-249-377-11	CARBON	0.47 5% 1/4W F	R577	1-216-025-00	METAL GLAZE	100 5% 1/10W	<TURNER>			
R339	1-216-025-00	METAL GLAZE	100 5% 1/10W	R504	1-249-417-11	CARBON	1K 5% 1/4W	R579	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W				
R340	1-216-025-00	METAL GLAZE	100 5% 1/10W	R505	1-249-423-11	CARBON	3.3K 5% 1/4W	R581	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R341	1-216-025-00	METAL GLAZE	100 5% 1/10W	R506	1-215-920-11	METAL OXIDE	3.3K 5% 3W F	R582	1-216-037-00	METAL GLAZE	330 5% 1/10W	TU101	1-693-185-11	TUNER (UV916H)	
R342	1-216-033-00	METAL GLAZE	220 5% 1/10W	R507	1-249-429-11	CARBON	10K 5% 1/4W F	R583	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W				
R343	1-216-022-00	METAL GLAZE	75 5% 1/10W	R508	1-216-373-11	METAL OXIDE	2.2 5% 2W F	R584	1-216-039-00	METAL GLAZE	390 5% 1/10W	<CRYSTAL>			
R344	1-216-022-00	METAL GLAZE	75 5% 1/10W	R509	1-216-478-11	METAL OXIDE	390 5% 3W F	R586	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W				
R345	1-216-022-00	METAL GLAZE	75 5% 1/10W	R510	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R587	1-216-045-00	METAL GLAZE	680 5% 1/10W	X301	1-567-504-11	OSCILLATOR, CRYSTAL	
R346	1-216-022-00	METAL GLAZE	75 5% 1/10W	R511	1-249-407-11	CARBON	150 5% 1/4W	R588	1-216-101-00	METAL GLAZE	150 5% 1/10W	X302	1-567-505-11	OSCILLATOR, CRYSTAL	
R347	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R512	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R589	1-216-073-00	METAL GLAZE	10K 5% 1/10W	X501	1-577-099-11	VIBRATOR, CERAMIC	
R348	1-216-029-00	METAL GLAZE	150 5% 1/10W	R513	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R590	1-216-049-00	METAL GLAZE	1K 5% 1/10W	*****	*****	*****	*****
R349	1-216-020-00	METAL GLAZE	62 5% 1/10W	R514	1-216-441-00	METAL OXIDE	27K 5% 1W F	R591	1-216-073-00	METAL GLAZE	10K 5% 1/10W	1-466-735-11	IF BLOCK (IPH-389P)	*****	*****
R350	1-216-029-00	METAL GLAZE	150 5% 1/10W	R515	1-249-432-11	CARBON	18K 5% 1/4W F	R592	1-216-083-00	METAL GLAZE	27K 5% 1/10W	*****	*****	*****	*****
R351	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R516	1-249-417-11	CARBON	1K 5% 1/4W F	R593	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	*****	*****	*****	*****
R352	1-216-033-00	METAL GLAZE	220 5% 1/10W	R517	1-249-427-11	CARBON	6.8K 5% 1/4W F	R594	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W				
R354	1-216-033-00	METAL GLAZE	220 5% 1/10W	R518	1-249-422-11	CARBON	2.7K 5% 1/4W F	R595	1-216-643-11	METAL CHIP	470 0.50W 1/10W	<CAPACITOR>			
R355	1-216-033-00	METAL GLAZE	220 5% 1/10W	R519	1-249-417-11	CARBON	1K 5% 1/4W F	R596	1-216-670-11	METAL CHIP	6.2K 0.50W 1/10W	C1	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R356	1-216-033-00	METAL GLAZE	220 5% 1/10W	R520	1-215-925-11	METAL OXIDE	22K 5% 3W F	R597	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C2	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R357	1-216-041-00	METAL GLAZE	470 5% 1/10W	R521	1-215-925-11	METAL OXIDE	22K 5% 3W F	R598	1-216-093-00	METAL CHIP	470 0.50W 1/10W	C3	1-124-903-11	ELECT 1MF	20% 50V
R358	1-216-031-00	METAL GLAZE	180 5% 1/10W	R522	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R600	1-216-190-00	METAL GLAZE	470 5% 1/8W	C4	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R359	1-216-033-00	METAL GLAZE	220 5% 1/10W	R523	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R606	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C5	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R360	1-216-033-00	METAL GLAZE	220 5% 1/10W	R524	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R609	1-216-689-11	METAL GLAZE	39K 5% 1/10W	R606	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R361	1-216-033-00	METAL GLAZE	220 5% 1/10W	R525	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R610	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R611	1-216-295-00	METAL GLAZE	0 5% 1/10W
R362	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R526	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R613	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C6	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R365	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R527	1-249-429-11	CARBON	10K 5% 1/4W	R614	1-216-399-00	METAL OXIDE	6.8 5% 3W F	C7	1-164-232-11	CERAMIC CHIP 0.0047MF	10% 50V
R366	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R528	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R615	1-216-474-11	METAL OXIDE	82 5% 3W F	C8	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R367	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R529	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R616	1-216-035-00	METAL GLAZE	270 5% 1/10W	C9	1-124-903-11	ELECT 22MF	20% 25V
R368	1-216-033-00	METAL GLAZE	220 5% 1/10W	R531	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R617	1-216-400-11	METAL OXIDE	8.2 5% 3W F	C10	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R369	1-216-033-00	METAL GLAZE	220 5% 1/10W	R532	1-249-385-11	CARBON	2.2 5% 1/4W F	R618	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	C11	1-124-477-11	ELECT 47MF	20% 16V
R370	1-216-033-00	METAL GLAZE	220 5% 1/10W	R533	1-216-039-00	METAL GLAZE	220 5% 3W F	R620	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C13	1-163-017-00	CERAMIC CHIP 0.01MF	10% 50V
R371	1-216-033-00	METAL GLAZE	220 5% 1/10W	R534	1-216-476-11	METAL OXIDE	180 5% 3W F	R621	1-216-399-00	METAL OXIDE	6.8 5% 3W F	C14	1-124-477-11	ELECT 47MF	20% 16V
R372	1-216-017-00	METAL GLAZE	47 5% 1/10W	R535	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R622	1-216-474-11	METAL OXIDE	82 5% 3W F	C15	1-124-903-11	ELECT 1MF	20% 50V
R373	1-216-017-00	METAL GLAZE	47 5% 1/10W	R536	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R623	1-216-400-11	METAL OXIDE	8.2 5% 3W F	C16	1-163-061-00	CERAMIC CHIP 0.015MF	10% 50V
R376	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R537	1-216-476-11	METAL OXIDE	180 5% 3W F	R624	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C17	1-162-638-11	CERAMIC CHIP 1MF	16V
R377	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	R538	1-216-081-00	METAL GLAZE	1K 5% 1/10W	R625	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C19	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
R378	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R539	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R626	1-216-033-00	METAL GLAZE	220 5% 1/10W	C20	1-124-902-00	ELECT 0.47MF	20% 50V
R379	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R540	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R627	1-216-033-00	METAL GLAZE	220 5% 1/10W	C21	1-124-903-11	ELECT 1MF	20% 50V
R380	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R541	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R628	1-215-866-11	METAL OXIDE	330 5% 1W F	C22	1-		

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**G**

G

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
CN1627*	J-564-512-11	PLUG, CONNECTOR 9P		IC601A	8-749-921-89	IC SE115N	
CN1628*	J-568-881-51	PIN, CONNECTOR 6P		IC605	8-759-982-21	IC RC78L05A	
CN1650*	J-568-878-51	PIN, CONNECTOR 3P		IC606	8-759-506-79	IC IR3M02	
CN1651*	J-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P					
CN1652*	J-564-511-51	PLUG, CONNECTOR 8P					

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

&lt;DIODE&gt;

D602	8-719-979-58	DIODE EGP10D	L607	1-408-404-00	INDUCTOR	3.9UH
D603	8-719-500-67	DIODE D5K40H	L610	1-424-602-11	COIL, CHOKE	800UH
D604	8-719-510-09	DIODE D10SC6M	L611	1-412-546-41	INDUCTOR	560UH
D605	8-719-988-31	DIODE D10SC6MR	L612	1-412-540-41	INDUCTOR	180UH
D607	8-719-025-81	DIODE S3V10SB	L613	1-412-522-21	INDUCTOR	5.6UH

D608	8-719-109-85	DIODE RD5.1ES-B2	Q603	8-729-011-15	TRANSISTOR 2SC4582NP
D609	8-719-921-42	DIODE MTZJ-5,1A	Q607	8-729-802-84	TRANSISTOR 2SC1755-D
D610	8-719-979-58	DIODE EGP10D	Q608	8-729-906-39	TRANSISTOR 2SC3271-P
D611	8-719-979-58	DIODE EGP10D	Q609	8-729-119-76	TRANSISTOR 2SA1175-HFE
D613	8-719-303-57	DIODE RU2AM	Q610	8-729-820-82	TRANSISTOR 2SA1208-S

&lt;TRANSISTOR&gt;

D614	8-719-979-58	DIODE EGP10D	Q611	8-729-820-82	TRANSISTOR 2SA1208-S
D615	8-719-975-76	DIODE SB-140	Q612	8-729-386-12	TRANSISTOR 2SS881-C
D616	8-719-025-81	DIODE S3V10SB	Q613	8-729-209-15	TRANSISTOR 2SD2012
D617	8-719-110-03	DIODE RD7.5ES-B2	Q614	8-729-011-15	TRANSISTOR 2SC4582NP
D618	8-719-911-19	DIODE ISS119	Q615	8-729-820-82	TRANSISTOR 2SA1208-S

D619	8-719-975-76	DIODE SB-140	Q616	8-729-208-39	TRANSISTOR 2SA1306A-Y
D620	△ 8-719-988-31	DIODE D10SC6MR	Q617	8-729-119-76	TRANSISTOR 2SA1175-HFE
D621	8-719-911-55	DIODE U05G	Q623	8-729-119-76	TRANSISTOR 2SA1175-HFE
D622	8-719-911-55	DIODE U05G	Q624	8-729-103-80	TRANSISTOR 2SA1261-K
D623	8-719-922-18	DIODE MTZJ-24C	Q629	8-729-378-84	TRANSISTOR 2SD788-5

&lt;RESISTOR&gt;

D624	8-719-109-89	DIODE RD5.6ES-B2	Q625	8-729-119-76	TRANSISTOR 2SA1175-HFE
D625	8-719-911-55	DIODE U05G	Q626	8-729-119-78	TRANSISTOR 2SC2785-HFE
D626	8-719-110-49	DIODE RD18ES-B2	Q627	8-729-119-78	TRANSISTOR 2SC2785-HFE
D629	8-719-911-19	DIODE ISS119	Q628	8-729-119-78	TRANSISTOR 2SC2785-HFE
D630	△ 8-719-510-09	DIODE D10SC6M	Q630	8-729-255-12	TRANSISTOR 2SC2551-0

&lt;DIODE&gt;

D631	△ 8-719-988-31	DIODE D10SC6MR	R604	1-202-933-61	FUSIBLE	0.1 10%
D632	8-719-500-67	DIODE D5K40H	R605	1-249-428-11	CARBON	8.2K 5%
D633	8-719-903-61	DIODE SLP361B	R606	1-214-919-00	CARBON	180K 5%
D634	8-719-911-19	DIODE ISS119	R607	1-249-418-11	CARBON	1.2K 5%
D636	8-719-109-85	DIODE RD5.1ES-B2	R609	1-249-438-11	CARBON	56K 5%

&lt;FERRITE BEAD&gt;

D638	8-719-911-19	DIODE ISS119	R611	1-249-418-11	CARBON	1.2K 5%
D639	8-719-981-00	DIODE ERC81-004	R612	1-202-883-11	SOLID	680K 20%
D640	△ 8-719-510-09	DIODE D10SC6M	R613	1-216-386-11	METAL OXIDE	0.56 5%
D641	8-719-921-80	DIODE MTZJ-11B	R614	1-249-418-11	CARBON	1.2K 5%
D650	8-719-160-81	DIODE RD27F-B2	R615	1-215-436-00	METAL	4.3K 1%

&lt;PICTURE TUBE SOCKET&gt;

FB602	1-410-397-21	FERRITE BEAD, INDUCTOR	R616	1-214-742-00	METAL OXIDE	3.6K 1%
FB603	1-410-397-21	FERRITE BEAD, INDUCTOR	R617	1-216-356-00	METAL OXIDE	3.9 5%
FB604	1-410-396-41	FERRITE BEAD, INDUCTOR	R618	1-249-418-11	CARBON	1.2K 5%
FB606	1-410-397-21	FERRITE BEAD, INDUCTOR	R619	1-216-444-11	METAL OXIDE	82K 5%
FB607	1-410-397-21	FERRITE BEAD, INDUCTOR	R620	1-249-418-11	CARBON	1.2K 5%

&lt;RELAY&gt;

FB608	1-410-396-41	FERRITE BEAD, INDUCTOR	R621	1-247-691-11	CARBON	18 5%
FB609	1-410-397-21	FERRITE BEAD, INDUCTOR	R622	1-249-424-11	CARBON	3.9K 5%
FB612	1-410-397-21	FERRITE BEAD, INDUCTOR	R623	1-249-417-11	CARBON	IK 5%
FB622	1-410-397-21	FERRITE BEAD, INDUCTOR	R624	1-214-779-00	METAL OXIDE	120K 1%
FB623	1-410-397-21	FERRITE BEAD, INDUCTOR	R625	1-216-386-11	METAL OXIDE	0.56 5%

&lt;NEON LAMP&gt;

FB630	1-410-396-41	FERRITE BEAD, INDUCTOR	R626	1-216-356-00	METAL OXIDE	3.9 5%
FB631	1-410-396-41	FERRITE BEAD, INDUCTOR	R627	1-202-883-11	SOLID	680K 20%
			R628	1-249-410-11	CARBON	270 5%

&lt;TRANSFORMER&gt;

&lt;TRANSISTOR&gt;

T601	△ 1-423-326-11	TRANSFORMER, CONVERTER (PIT)	R629	1-216-389-11	METAL OXIDE	1 5%
T603	△ 1-424-020-11	PRT	R630	1-214-627-11	RES, ADJ, CARBON	IK
T604	△ 1-450-149-11	TRANSFORMER, HEATER	R631	1-214-627-11	RES, ADJ, CARBON	IK
T605	△ 1-421-862-11	LFT	R632	1-216-346-00	METAL OXIDE	4.3K 1%
T606	△ 1-423-327-11	TRANSFORMER, CONVERTER	R633	1-216-347-00	METAL OXIDE	2.2K 5%

&lt;TRANSFORMER&gt;

&lt;TRANSISTOR&gt;

Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE
T607	8-729-119-80	TRANSISTOR 2SC2688-LK
T608	8-729-255-12	TRANSISTOR 2SC2551-O
T609	8-729-200-17	TRANSISTOR 2SA1091-O
T610	8-729-119-78	TRANSISTOR 2SC2785-HFE

&lt;TRANSISTOR&gt;

&lt;TRANSISTOR&gt;

Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE
T607	8-729-119-80	TRANSISTOR 2SC2688-LK
T608	8-729-255-12	TRANSISTOR 2SC2551-O
T609	8-729-200-17	TRANSISTOR 2SA1091-O
T610	8-729-119-78	TRANSISTOR 2SC2785-HFE

&lt;TRANSISTOR&gt;

Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE
T607	8-729-119-80	TRANSISTOR 2SC2688-LK
T608	8-729-255-12	TRANSISTOR 2SC2551-O
T609	8-729-200-17	TRANSISTOR 2SA1091-O
T610	8-729-119-78	TRANSISTOR 2SC2785-HFE

&lt;TRANSISTOR&gt;

Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE





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REF. NO. PART NO. DESCRIPTION

REF. NO. PART NO. DESCRIPTION

Q706 8-729-200-17 TRANSISTOR 2SA1091-0

## &lt;RESISTOR&gt;

R701	1-202-847-00	SOLID	560K	20%	1/2W
R702	1-202-814-11	SOLID	33K	20%	1/2W
R703	1-202-818-00	SOLID	1K	20%	1/2W
R704	1-202-842-11	SOLID	220K	20%	1/2W
R705	1-202-828-11	SOLID	6.8K	20%	1/2W
R706	1-202-561-00	SOLID	330	5%	1/2W
R707	1-216-510-11	METAL OXIDE	8.2K	5%	5W F
R708	1-249-405-11	CARBON	100	5%	1/4W F
R709	1-249-405-11	CARBON	100	5%	1/4W F
R710	1-215-927-00	METAL OXIDE	47K	5%	3W F
R711	1-249-405-11	CARBON	100	5%	1/4W F
R712	1-249-421-11	CARBON	2.2K	5%	1/4W F
R714	1-249-401-11	CARBON	47	5%	1/4W F
R716	1-249-405-11	CARBON	100	5%	1/4W F
R717	1-249-399-11	CARBON	33	5%	1/4W F
R718	1-249-412-11	CARBON	390	5%	1/4W F
R719	1-249-407-11	CARBON	150	5%	1/4W F
R720	1-249-405-11	CARBON	100	5%	1/4W F
R721	1-249-409-11	CARBON	220	5%	1/4W F
R722	1-215-423-00	METAL	1.2K	1%	1/4W F
R724	1-215-429-00	METAL	2.2K	1%	1/4W F
<VARIABLE RESISTOR>					
RV701	1-249-410-11	CARBON	270	5%	1/4W F

## &lt;SPARK GAP&gt;

SG701	1-519-422-11	GAP, SPARK
SG702	1-519-422-11	GAP, SPARK

## &lt;CONNECTOR&gt;

CG1	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P
CG3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
CG16	*1-568-880-81	PIN, CONNECTOR 5P

## &lt;PICTURE TUBE SOCKET&gt;

## &lt;SPARK GAP&gt;

## &lt;CONNECTOR&gt;

## &lt;PICTURE TUBE SOCKET&gt;

The components identified by shading and mark are critical for safety.  
Replace only with part number specified.

The components identified by shading and mark are critical for safety.  
Replace only with part number specified.

CB Ds

REF. NO. PART NO. DESCRIPTION

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 \*A-1331-230-A CB BOARD, COMPLETE  
 \*\*\*\*\*

\*4-341-751-01 EYELET (EY14-EY15)  
 \*4-341-752-01 EYELET (EY11-EY13)  
 4-373-933-01 SHEET (TRANSISTOR), BN  
 \*4-389-343-01 SPRING

C761 1-162-115-00 CERAMIC 330PF 10% 2KV  
 C762 1-123-948-00 ELECT 22MF 20% 250V  
 C763 1-102-818-00 SOLID 1K 20% 1/2W  
 C764 1-102-050-00 CERAMIC 0.01MF 500V  
 C765 1-130-479-00 NYLAR 0.0047MF 5% 50V

L731 1-408-429-00 INDUCTOR 470UH  
 L732 1-408-159-00 COIL, SPOOK CHOKE 3.3UH  
 L733 1-408-159-00 COIL, SPOOK CHOKE 3.3UH  
 L734 1-408-413-00 INDUCTOR 22UH

C766 1-101-006-00 SOLID 330 5% 1/2W  
 C767 1-101-006-00 CERAMIC 0.047MF 50V  
 C768 1-124-120-11 ELECT 220MF 20% 16V  
 C769 1-124-120-11 ELECT 220MF 20% 16V  
 C770 1-124-120-11 ELECT 220MF 20% 16V  
 C771 1-102-112-00 CERAMIC 330PF 10% 50V

CG1 \*1-508-784-00 PIN, CONNECTOR (5MM PITCH) 1P  
 CG3 \*1-508-765-00 PIN, CONNECTOR (5MM PITCH) 3P  
 CG16 \*1-568-880-81 PIN, CONNECTOR 5P

SG731 1-519-422-11 GAP, SPARK  
 SG732 1-519-422-11 GAP, SPARK

SG761 1-519-422-11 GAP, SPARK  
 SG762 1-519-422-11 GAP, SPARK

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 \*1-644-278-12 DS BOARD  
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C1745 1-126-101-11 ELECT 100MF 20% 16V  
 C1746 1-126-101-11 ELECT 100MF 20% 16V  
 C1747 1-126-101-11 ELECT 100MF 20% 16V  
 C1748 1-126-101-11 ELECT 100MF 20% 16V  
 C1750 1-126-233-11 ELECT 22MF 20% 25V

C1751 1-126-101-11 ELECT 100MF 20% 16V  
 C1752 1-126-233-11 ELECT 22MF 20% 25V  
 C1753 1-126-233-11 ELECT 22MF 20% 25V

C1851 1-102-074-00 CERAMIC 0.001MF 10% 50V

DS6 I-691-182-11 CONNECTOR (BOARD TO BOARD) 12P

<IC>  
 IC1711 8-759-111-69 IC UPC1037HA  
 IC1712 8-759-602-19 IC M5220L  
 IC1713 8-759-111-69 IC UPC1037HA

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 <RESISTOR>

Q761 8-729-119-78 TRANSISTOR 2SC2785-HFE  
 Q762 8-729-119-78 TRANSISTOR 2SC2785-HFE

Q763 8-729-119-80 TRANSISTOR 2SC2688-LX  
 Q764 8-729-255-12 TRANSISTOR 2SC2551-0  
 Q765 8-729-200-17 TRANSISTOR 2SA1091-0

Q766 8-729-200-17 TRANSISTOR 2SA1091-0

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 <CAPACITOR>

R1840 1-215-445-00 METAL 10K 1% 1/4W  
 R1841 1-215-433-00 METAL 3.3K 1% 1/4W  
 R1842 1-215-465-00 METAL 6.8K 1% 1/4W  
 R1843 1-215-421-00 METAL 1K 1% 1/4W  
 R1844 1-215-455-00 METAL 27K 1% 1/4W

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1845	1-215-455-00	METAL	27K 1% 1/4W	C1703	1-124-907-11	ELECT	10MF	20%	50V	<DIODE>	L904	1-459-313-00	COIL WITH CORE (HWC)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
R1846	1-215-421-00	METAL	1K 1% 1/4W	C1704	1-213-875-11	ELECT	10MF	20%	50V		902	8-719-911-19	DIODE ISS119	<TRANSISTOR>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
R1850	1-215-461-00	METAL	47K 1% 1/4W	C1705	1-102-963-00	CERAMIC	33PF	5%	50V	D901	8-719-911-19	DIODE ISS119	902	8-729-900-89	TRANSISTOR DTC144BS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1851	1-215-461-00	METAL	47K 1% 1/4W	C1706	1-102-963-00	CERAMIC	33PF	5%	50V	D902	8-719-911-19	DIODE V096	906	8-729-119-78	TRANSISTOR 2SC2785-HFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1852	1-215-429-00	METAL	2.2K 1% 1/4W	C1707	1-102-963-00	CERAMIC	33PF	5%	50V	D1701	8-719-900-95	DIODE V096	907	8-729-119-78	TRANSISTOR 2SC2785-HFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1853	1-215-397-00	METAL	100 1% 1/4W	C1708	1-102-963-00	CERAMIC	33PF	5%	50V	D1702	8-719-911-19	DIODE ISS119	908	8-729-900-89	TRANSISTOR DTC144BS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1854	1-215-429-00	METAL	2.2K 1% 1/4W	C1709	1-102-963-00	CERAMIC	33PF	5%	50V	D1703	8-719-900-95	DIODE V096	909	8-729-119-78	TRANSISTOR 2SC2785-HFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1855	1-215-397-00	METAL	100 1% 1/4W	C1710	1-102-963-00	CERAMIC	33PF	5%	50V	D1704	8-719-900-95	DIODE V096	910	8-729-119-78	TRANSISTOR 2SC2785-HFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1940	1-215-445-00	METAL	10K 1% 1/4W	C1711	1-126-233-11	ELECT	22MF	20%	50V	D1705	8-719-900-95	DIODE V096	911	8-729-119-76	TRANSISTOR 2SA1175-HFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1941	1-215-433-00	METAL	3.3K 1% 1/4W	C1712	1-126-233-11	ELECT	22MF	20%	50V	D1706	8-719-900-95	DIODE V096	912	8-729-119-76	TRANSISTOR 2SA1175-HFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
R1942	1-215-421-00	METAL	1K 1% 1/4W	C1713	1-102-074-00	CERAMIC	0.001MF	10%	50V	D1707	8-719-911-19	DIODE ISS119																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
R1943	1-215-465-00	METAL	68K 1% 1/4W	C1714	1-124-478-11	ELECT	100MF	20%	25V	D1708	8-719-911-19	DIODE ISS119																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
R1944	1-215-421-00	METAL	1K 1% 1/4W	C1715	1-124-478-11	ELECT	100MF	20%	25V	D1709	8-719-911-19	DIODE ISS119																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
R1945	1-215-455-00	METAL	27K 1% 1/4W	C1716	1-126-803-11	ELECT	47MF	20%	25V	D1710	8-719-911-19	DIODE ISS119																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
R1946	1-215-455-00	METAL	27K 1% 1/4W	C1717	1-126-803-11	ELECT	47MF	20%	25V	D1711	8-719-911-19	DIODE ISS119																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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RV983	1-241-630-11	RES. ADJ. CARBON 10K	C1719	1-124-234-00	ELECT	22MF	20%	16V	D1712	8-719-911-19	DIODE ISS119	R901	1-215-463-00	METAL	56K 1% 1/4W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
RV984	1-241-630-11	RES. ADJ. CARBON 10K	C1720	1-130-491-00	NYLAR	0.047MF	5%	50V	D1713	8-719-911-19	DIODE ISS119	R902	1-215-463-00	METAL	56K 1% 1/4W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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*A-341-751-01 EYELET (EY1-EY10)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
4-382-854-11 SCREW (M3X10), P. SW (+)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
*4-395-527-01 HOLDER (B), TR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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C1725	1-102-963-00	CERAMIC	33PF	5%	50V	D1726	1-124-122-11	ELECT	100MF	20%	35V	D1727	1-102-963-00	CERAMIC	33PF	5%	50V	D1728	1-102-963-00	CERAMIC	33PF	5%	50V	D1729	1-106-367-00	NYLAR	0.01MF	10%	200V	D1730	1-102-963-00	CERAMIC	33PF	5%	50V	D1731	1-124-122-11	ELECT	100MF	20%	35V	D1732	1-106-367-00	NYLAR	0.01MF	10%	200V	D1733	1-102-963-00	CERAMIC	33PF	5%	50V	D1734	1-102-963-00	CERAMIC	33PF	5%	50V	F901	Δ 1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	R906	1-215-469-00	METAL	22K 1% 1/4W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
C1735	1-124-122-11	ELECT	100MF	20%	35V	C1736	1-106-367-00	NYLAR	0.01MF	10%	200V	C1737	1-124-937-91	ELECT	10MF	20%	16V	C1738	1-124-122-11	ELECT	100MF	20%	35V	C1739	1-136-153-00	FILM	0.01MF	5%	50V	F901	Δ 1-532-237-11	CLIP, FUSE; F901	R907	1-215-469-00	METAL	22K 1% 1/4W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
C1740	1-124-122-11	ELECT	100MF	20%	35V	C1741	1-124-122-11	ELECT	100MF	20%	35V	C1742	1-126-104-11	ELECT	470MF	20%	35V	C1744	1-124-478-11	ELECT	100MF	20%	25V	C1745	1-126-375-11	ELECT	100MF	20%	25V	C1746	1-126-101-11	ELECT	100MF	20%	16V	C1747	1-126-157-11	ELECT	10MF	20%	16V	C1748	1-130-471-00	NYLAR	0.001MF	5%	50V	C1749	1-102-963-00	CERAMIC	33PF	5%	50V	C1750	1-102-963-00	CERAMIC	33PF	5%	50V	C1751	1-102-963-00	CERAMIC	33PF	5%	50V	C1752	1-102-963-00	CERAMIC	33PF	5%	50V	C1753	1-102-963-00	CERAMIC	33PF	5%	50V	C1754	1-102-963-00	CERAMIC	33PF	5%	50V	F902	Δ 1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	R908	1-215-399-00	METAL	120 1% 1/4W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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C1755	1-102-963-00	CERAMIC	33PF	5%	50V	C1756	1-130-495-00	NYLAR	0.1MF	5%	50V	C1757	1-126-096-11	ELECT	10MF	20%	25V	C1758	1-124-477-11	ELECT	47MF	20%	16V	C1759	1-124-477-11	ELECT	47MF	20%	16V	C1760	1-126-101-11	ELECT	100MF	20%	25V	C1761	1-126-157-11	ELECT	10MF	20%	16V	C1762	1-130-495-00	NYLAR	0.001MF	5%	50V	C1763	1-102-963-00	CERAMIC	33PF	5%	50V	C1764	1-102-963-00	CERAMIC	33PF	5%	50V	C1765	1-102-963-00	CERAMIC	33PF	5%	50V	C1766	1-126-157-11	ELECT	10MF	20%	16V	C1767	1-130-495-00	NYLAR	0.1MF	5%	50V	C1768	1-126-096-11	ELECT	10MF	20%	25V	C1769	1-126-096-11	ELECT	10MF	20%	25V	C1770	1-126-096-11	ELECT	10MF	20%	25V	C1771	1-126-096-11	ELECT	10MF	20%	25V	C1772	1-126-096-11	ELECT	10MF	20%	25V	C1773	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1774	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1775	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1776	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1777	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1778	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1779	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1780	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1781	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1782	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1783	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1784	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1785	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1786	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1787	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1788	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1789	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1790	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1791	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1792	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1793	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1794	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1795	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1796	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1797	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1798	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1799	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1800	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1801	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1802	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1803	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1804	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1805	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1806	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1807	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1808	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1809	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1810	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1811	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1812	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1813	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1814	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1815	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1816	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1817	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1818	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1819	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1820	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1821	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1822	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1823	1-102-063-00	CERAMIC	33PF	5%	50V	C1824	1-102-063-00	CERAMIC	33PF	5%	50V	C1825	1-102-063-00	CERAMIC	33PF	5%	50V	C1826	1-102-063-00	CERAMIC	33PF	5%	50V	C1827	1-102-063-00	CERAMIC	33PF	5%	50V	C1828	1-102-063-00	CERAMIC	33PF	5%	50V	C1829	1-102-063-00	CERAMIC	33PF	5%	50V	C1830	1-102-063-00	CERAMIC	33PF	5%	50V	C1831	1-102-063-00	CERAMIC	33PF	5%	50V	C1832	1-102-063-00	CERAMIC	33PF	5%	50V	C1833	1-102-063-00	CERAMIC	33PF	5%	50V	C1834	1-102-063-00	CERAMIC	33PF	5%	50V	C1835	1-102-063-00	CERAMIC	33PF	5%	50V	C1836	1-102-063-00	CERAMIC	33PF	5%	50V	C1837	1-102-063-00	CERAMIC	33PF	5%	50V	C1838	1-102-063-00	CERAMIC	33PF	5%	50V	C1839	1-102-063-00	CERAMIC	33PF	5%	50V	C1840	1-102-063-00	CERAMIC	33PF	5%	50V	C1841	1-102-063-00	CERAMIC	33PF	5%	50V	C1842	1-102-063-00	CERAMIC	33PF	5%	50V	C1843	1-102-063-00	CERAMIC	33PF	5%	50V	C1844	1-102-063-00	CERAMIC	33PF	5%	50V	C1845	1-102-063-00	CERAMIC	33PF	5%	50V	C1846	1-102-063-00	CERAMIC	33PF	5%	50V	C1847	1-102-063-00	CERAMIC	33PF	5%	50V	C1848	1-102-063-00	CERAMIC	33PF	5%	50V	C1849	1-102-063-00	CERAMIC	33PF	5%	50V	C1850	1-102-063-00	CERAMIC	33PF	5%	50V	C1851	1-102-063-00	CERAMIC	33PF	5%	50V	C1852

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
R952	I-215-429-00	METAL	2.2K 1% 1/4W	R1719	I-214-792-00	METAL	I 1% 1/2W	R1782	I-215-898-11	METAL OXIDE	10K 5% 2W	F	R1866	I-215-453-00	METAL	22K 1% 1/4W
R953	I-215-439-00	METAL	5.6K 1% 1/4W	R1720	I-249-411-11	CARBON	330 5% 1/4W	R1783	I-214-804-51	METAL	3.3 1% 1/2W	F	R1867	I-215-437-00	METAL	4.7K 1% 1/4W
R954	I-215-439-00	METAL	5.6K 1% 1/4W	R1721	I-249-417-11	CARBON	1K 5% 1/4W	R1784	I-214-804-51	METAL	3.3 1% 1/2W	F	R1868	I-215-449-00	METAL	15K 1% 1/4W
R955	I-215-435-00	METAL	3.9K 1% 1/4W	R1722	I-249-411-11	CARBON	330 5% 1/4W	R1785	I-215-898-11	METAL OXIDE	10K 5% 2W	F	R1869	I-215-445-00	METAL	10K 1% 1/4W
R956	I-215-437-00	METAL	4.77 1% 1/4W	R1723	I-249-417-11	CARBON	1K 5% 1/4W	R1786	I-214-804-51	METAL	3.3 1% 1/2W	F	R1870	I-215-445-00	METAL	10K 1% 1/4W
R957	I-215-441-00	METAL	6.8K 1% 1/4W	R1724	I-215-886-11	METAL OXIDE	100 5% 2W	R1787	I-214-804-51	METAL	3.3 1% 1/2W	F	R1871	I-215-445-00	METAL	10K 1% 1/4W
R958	I-215-437-00	METAL	4.7K 1% 1/4W	R1725	I-215-886-11	METAL OXIDE	100 5% 2W	R1788	I-249-433-11	CARBON	22K 5% 1/4W	F	R1872	I-215-437-00	METAL	4.7K 1% 1/4W
R959	I-215-439-00	METAL	5.6K 1% 1/4W	R1726	I-215-886-11	METAL OXIDE	100 5% 2W	R1789	I-249-441-11	CARBON	100K 5% 1/4W	F	R1873	I-215-637-00	METAL	4.7K 1% 1/4W
R960	I-215-439-00	METAL	5.6K 1% 1/4W	R1727	I-214-792-00	METAL	I 1% 1/2W	R1790	I-249-433-11	CARBON	22K 5% 1/4W	F	R1874	I-215-437-00	METAL	4.7K 1% 1/4W
R961	I-215-439-00	METAL	5.6K 1% 1/4W	R1728	I-214-792-00	METAL	I 1% 1/2W	R1791	I-249-429-11	CARBON	10K 5% 1/4W	F	R1875	I-215-437-00	METAL	4.7K 1% 1/4W
R962	I-215-441-00	METAL	6.8K 1% 1/4W	R1729	I-214-792-00	METAL	I 1% 1/2W	R1792	I-215-445-00	METAL	10K 1% 1/4W	F	R1876	I-215-437-00	METAL	4.7K 1% 1/4W
R963	I-215-441-00	METAL	6.8K 1% 1/4W	R1730	I-249-405-11	CARBON	100 5% 1/4W	R1793	I-249-405-11	CARBON	100 5% 1/4W	F	R1877	I-215-437-00	METAL	4.7K 1% 1/4W
R964	I-215-441-00	METAL	6.8K 1% 1/4W	R1731	I-249-417-11	CARBON	1K 5% 1/4W	R1794	I-215-429-00	METAL	2.2K 1% 1/4W	F	R1878	I-215-475-00	METAL	180K 1% 1/4W
R965	I-215-909-11	METAL OXIDE	47 5% 3W	R1732	I-249-405-11	CARBON	100 5% 1/4W	R1795	I-249-433-11	CARBON	22K 5% 1/4W	F	R1879	I-215-475-00	METAL	180K 1% 1/4W
R966	I-215-469-00	METAL	100K 1% 1/4W	R1733	I-249-405-11	CARBON	100 5% 1/4W	R1796	I-249-405-11	CARBON	100 5% 1/4W	F	R1880	I-215-475-00	METAL	180K 1% 1/4W
R967	I-215-421-00	METAL	1K 1% 1/4W	R1734	I-249-405-11	CARBON	100 5% 1/4W	R1797	I-249-429-11	CARBON	10K 5% 1/4W	F	R1881	I-215-461-00	METAL	47K 1% 1/4W
R968	I-215-437-00	METAL	4.7K 1% 1/4W	R1735	I-249-405-11	CARBON	100 5% 1/4W	R1798	I-249-423-11	CARBON	3.3K 5% 1/4W	F	R1882	I-215-445-00	METAL	10K 1% 1/4W
R969	I-249-421-11	CARBON	2.2K 5% 1/4W	R1736	I-249-423-11	CARBON	3.3K 5% 1/4W	R1800	I-249-405-11	CARBON	100 5% 1/4W	F	R1883	I-215-453-00	METAL	22K 1% 1/4W
R970	I-215-909-11	METAL OXIDE	47 5% 3W	R1737	I-249-423-11	CARBON	3.3K 5% 1/4W	R1801	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1884	I-215-397-00	METAL	100 1% 1/4W
R971	I-249-421-11	CARBON	2.2K 5% 1/4W	R1738	I-249-423-11	CARBON	3.3K 5% 1/4W	R1802	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1885	I-215-445-00	METAL	10K 1% 1/4W
R972	I-249-431-11	CARBON	15K 5% 1/4W	R1739	I-249-423-11	CARBON	3.3K 5% 1/4W	R1803	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1886	I-215-445-00	METAL	10K 1% 1/4W
R973	I-249-431-11	CARBON	15K 5% 1/4W	R1740	I-249-417-11	CARBON	1K 5% 1/4W	R1805	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1887	I-215-397-00	METAL	100 1% 1/4W
R974	I-215-399-00	METAL	120 1% 1/4W	R1741	I-249-423-11	CARBON	3.3K 5% 1/4W	R1806	I-249-405-11	CARBON	100 5% 1/4W	F	R1888	I-215-461-00	METAL	47K 1% 1/4W
R975	I-215-399-00	METAL	120 1% 1/4W	R1742	I-249-423-11	CARBON	3.3K 5% 1/4W	R1807	I-249-405-11	CARBON	100 5% 1/4W	F	R1889	I-215-457-00	METAL	33K 1% 1/4W
R976	I-215-399-00	METAL	120 1% 1/4W	R1743	I-249-417-11	CARBON	1K 5% 1/4W	R1808	I-214-792-00	METAL	1 1% 1/2W	F	R1890	I-215-457-00	METAL	33K 1% 1/4W
R977	I-215-399-00	METAL	120 1% 1/4W	R1744	I-249-411-11	CARBON	330 5% 1/4W	R1809	I-214-792-00	METAL	1 1% 1/2W	F	R1892	I-215-445-00	METAL	10K 1% 1/4W
R978	I-215-399-00	METAL	120 1% 1/4W	R1745	I-249-405-11	CARBON	100 5% 1/4W	R1810	I-214-792-00	METAL	1 1% 1/2W	F	R1894	I-215-429-00	METAL	2.2K 1% 1/4W
R979	I-215-399-00	METAL	120 1% 1/4W	R1746	I-214-792-00	METAL	I 1% 1/2W	R1811	I-214-792-00	METAL	1 1% 1/2W	F	R1895	I-215-445-00	METAL	10K 1% 1/4W
R980	I-215-399-00	METAL	120 1% 1/4W	R1747	I-215-886-11	METAL OXIDE	100 5% 2W	R1812	I-214-792-00	METAL	1 1% 1/2W	F	R1896	I-215-445-00	METAL	10K 1% 1/4W
R981	I-215-399-00	METAL	120 1% 1/4W	R1748	I-215-421-00	METAL	I 1% 1/4W	R1813	I-214-792-00	METAL	1 1% 1/2W	F	R1897	I-215-449-00	METAL	15K 1% 1/4W
R982	I-249-431-11	CARBON	15K 5% 1/4W	R1749	I-215-421-00	METAL	I 1% 1/4W	R1814	I-249-431-11	CARBON	15K 5% 1/4W	F	R1898	I-215-445-00	METAL	10K 1% 1/4W
R983	I-249-431-11	CARBON	15K 5% 1/4W	R1750	I-215-421-00	METAL	I 1% 1/4W	R1815	I-247-885-00	CARBON	180K 5% 1/4W	F	R1899	I-215-421-00	METAL	1K 1% 1/4W
R984	I-214-804-51	METAL	3.3 1% 1/2W	R1751	I-215-421-00	METAL	I 1% 1/4W	R1816	I-249-431-11	CARBON	15K 5% 1/4W	F	R1900	I-215-429-00	METAL	2.2K 1% 1/4W
R985	I-214-804-51	METAL	3.3 1% 1/2W	R1752	I-215-421-00	METAL	I 1% 1/4W	R1817	I-247-885-00	CARBON	180K 5% 1/4W	F	R1901	I-215-449-00	METAL	15K 1% 1/4W
R986	I-214-804-51	METAL	3.3 1% 1/2W	R1753	I-215-421-00	METAL	I 1% 1/4W	R1818	I-249-405-11	CARBON	100 5% 1/4W	F	R1902	I-215-445-00	METAL	10K 1% 1/4W
R987	I-215-421-00	METAL	1K 1% 1/4W	R1754	I-214-792-00	METAL	I 1% 1/2W	R1819	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1903	I-215-445-00	METAL	10K 1% 1/4W
R988	I-215-421-00	METAL	1K 1% 1/4W	R1755	I-215-469-00	METAL	100K 1% 1/4W	R1820	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1904	I-215-445-00	METAL	10K 1% 1/4W
R989	I-215-421-00	METAL	1K 1% 1/4W	R1756	I-215-437-00	METAL	4.7K 1% 1/4W	R1821	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1905	I-215-445-00	METAL	10K 1% 1/4W
R990	I-215-421-00	METAL	1K 1% 1/4W	R1757	I-215-437-00	METAL	4.7K 1% 1/4W	R1822	I-215-445-00	METAL	10K 1% 1/4W	F	R1906	I-215-429-00	METAL	2.2K 1% 1/4W
R991	I-215-421-00	METAL	1K 1% 1/4W	R1758	I-215-437-00	METAL	4.7K 1% 1/4W	R1823	I-215-445-00	METAL	10K 1% 1/4W	F	R1907	I-215-445-00	METAL	10K 1% 1/4W
R992	I-215-421-00	METAL	1K 1% 1/4W	R1759	I-249-405-11	CARBON	100 5% 1/4W	R1824	I-215-433-00	METAL	3.3K 1% 1/4W	F	R1908	I-215-445-00	METAL	10K 1% 1/4W
R993	I-249-429-11	CARBON	10K 5% 1/4W	R1760	I-249-427-11	CARBON	6.8K 5% 1/4W	R1825	I-215-433-00	METAL	3.3K 1% 1/4W	F	R1909	I-215-445-00	METAL	10K 1% 1/4W
R994	I-249-429-11	CARBON	10K 5% 1/4W	R1761	I-249-419-11	CARBON	1.5K 5% 1/4W	R1826	I-215-433-00	METAL	3.3K 1% 1/4W	F	R1910	I-215-445-00	METAL	10K 1% 1/4W
R995	I-215-457-00	METAL	33K 1% 1/4W	R1762	I-215-445-00	METAL	10K 1% 1/4W	R1827	I-215-445-00	METAL	10K 1% 1/4W	F	R1911	I-215-453-00	METAL	22K 1% 1/4W
R996	I-215-473-00	METAL	150K 1% 1/4W	R1763	I-249-427-11	CARBON	6.8K 5% 1/4W	R1828	I-215-445-00	METAL	10K 1% 1/4W	F	R1916	I-215-423-00	METAL	1.2K 1% 1/4W
R999	I-215-455-00	METAL	27K 1% 1/4W	R1764	I-249-419-11	CARBON	1.5K 5% 1/4W	R1829	I-249-434-11	CARBON	27K 5% 1/4W	F	R1920	I-215-453-00	METAL	22K 1% 1/4W
R1701	I-249-411-11	CARBON	330 5% 1/4W	R1765	I-249-419-11	CARBON	1.5K 5% 1/4W	R1830	I-249-434-11	CARBON	27K 5% 1/4W	F	R1921	I-215-445-00	METAL	10K 1% 1/4W
R1702	I-249-427-11	CARBON	6.8K 5% 1/4W	R1766	I-249-427-11	CARBON	6.8K 5% 1/4W	R1831	I-249-405-11	CARBON	100 5% 1/4W	F	R1922	I-215-445-00	METAL	10K 1% 1/4W
R1703	I-249-427-11	CARBON	6.8K 5% 1/4W	R1767	I-249-427-11	CARBON	6.8K 5% 1/4W	R1832	I-215-471-00	METAL	120K 1% 1/4W	F	R1924	I-215-429-00	METAL	2.2K 1% 1/4W
R1704	I-249-411-11	CARBON	330 5% 1/4W	R1768	I-249-439-11	CARBON	6.8K 5% 1/4W	R1833	I-215-471-00	METAL	120K 1% 1/4W	F	R1925	I-215-429-00	METAL	2.2K 1% 1/4W
R1705	I-249-411-11	CARBON	330 5% 1/4W	R1769	I-215-445-00	METAL	10K 1% 1/4W	R1834	I-215-471-00	METAL	120K 1% 1/4W	F	R1926	I-215-429-00	METAL	2.2K 1% 1/4W
R1706	I-249-427-11	CARBON	6.8K 5% 1/4W	R1770	I-249-405-11	CARBON	100 5% 1/4W	R1835	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1927	I-215-445-00	METAL	10K 1% 1/4W
R1707	I-249-411-11	CARBON	330 5% 1/4W	R1771	I-249-405-11	CARBON	100 5% 1/4W	R1836	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1928</			

D V

REF. NO. PART NO.

DESCRIPTION

REF. NO. PART NO.

DESCRIPTION

REMARK

## &lt;VARIABLE RESISTOR&gt;

RV901 1-241-631-11 RES, ADJ, CARBON 22K  
 RV902 1-241-631-11 RES, ADJ, CARBON 22K  
 RV903 1-241-631-11 RES, ADJ, CARBON 22K  
 RV904 1-241-631-11 RES, ADJ, CARBON 22K  
 RV905 1-241-631-11 RES, ADJ, CARBON 22K

RV906 1-241-631-11 RES, ADJ, CARBON 22K  
 RV907 1-241-631-11 RES, ADJ, CARBON 22K  
 RV908 1-241-631-11 RES, ADJ, CARBON 22K  
 RV909 1-241-631-11 RES, ADJ, CARBON 22K  
 RV910 1-241-631-11 RES, ADJ, CARBON 22K

RV911 1-241-627-11 RES, ADJ, CARBON 1K  
 RV912 1-241-631-11 RES, ADJ, CARBON 22K  
 RV913 1-238-023-11 RES, ADJ, CARBON 470K  
 RV914 1-241-630-11 RES, ADJ, CARBON 10K  
 RV915 1-241-630-11 RES, ADJ, CARBON 10K

RV916 1-241-631-11 RES, ADJ, CARBON 22K  
 RV917 1-241-631-11 RES, ADJ, CARBON 22K  
 RV918 1-241-631-11 RES, ADJ, CARBON 22K  
 RV919 1-241-631-11 RES, ADJ, CARBON 22K  
 RV920 1-241-631-11 RES, ADJ, CARBON 22K

RV966 1-241-631-11 RES, ADJ, CARBON 22K  
 RV967 1-241-631-11 RES, ADJ, CARBON 22K  
 RV968 1-241-631-11 RES, ADJ, CARBON 22K  
 RV969 1-241-631-11 RES, ADJ, CARBON 22K  
 RV970 1-241-631-11 RES, ADJ, CARBON 22K  
 RV971 1-241-631-11 RES, ADJ, CARBON 22K

RV972 1-241-631-11 RES, ADJ, CARBON 22K  
 RV973 1-241-631-11 RES, ADJ, CARBON 22K  
 RV974 1-241-631-11 RES, ADJ, CARBON 22K  
 RV975 1-241-631-11 RES, ADJ, CARBON 22K  
 RV976 1-241-631-11 RES, ADJ, CARBON 22K

RV977 1-241-631-11 RES, ADJ, CARBON 22K  
 RV978 1-241-631-11 RES, ADJ, CARBON 22K  
 RV979 1-241-631-11 RES, ADJ, CARBON 22K  
 RV980 1-241-632-11 RES, ADJ, CARBON 47K  
 RV981 1-241-631-11 RES, ADJ, CARBON 22K

RV982 1-241-631-11 RES, ADJ, CARBON 22K

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\*A-1342-193-A VM BOARD, COMPLETE

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\*4-395-527-01 HOLDER (B), TR

## &lt;CAPACITOR&gt;

RV926 1-241-631-11 RES, ADJ, CARBON 22K  
 RV927 1-241-631-11 RES, ADJ, CARBON 22K  
 RV928 1-241-629-11 RES, ADJ, CARBON 4.7K  
 RV929 1-241-631-11 RES, ADJ, CARBON 22K  
 RV930 1-241-629-11 RES, ADJ, CARBON 4.7K

C1501 1-102-129-00 CERAMIC 0.01MF 10% 50V  
 C1502 1-126-101-01 ELECT 100PF 20% 16V  
 C1504 1-108-700-11 MYLAR 0.047MF 10% 200V  
 C1505 1-124-907-11 ELECT 10MF 20% 50V  
 C1506 1-108-688-11 MYLAR 0.0047MF 10% 200V

RV931 1-241-631-11 RES, ADJ, CARBON 22K  
 RV932 1-241-631-11 RES, ADJ, CARBON 22K  
 RV933 1-241-631-11 RES, ADJ, CARBON 22K  
 RV934 1-241-631-11 RES, ADJ, CARBON 22K  
 RV935 1-241-631-11 RES, ADJ, CARBON 22K

C1507 1-106-367-00 MYLAR 0.01MF 10% 100V  
 C1508 1-162-318-11 CERAMIC 0.001MF 10% 500V  
 C1509 1-106-367-00 MYLAR 0.01MF 10% 500V  
 C1510 1-126-355-11 ELECT 33MF 20% 160V  
 C1511 1-124-799-11 ELECT 2.2MF 20% 160V

RV936 1-241-631-11 RES, ADJ, CARBON 22K  
 RV937 1-241-630-11 RES, ADJ, CARBON 10K  
 RV938 1-241-630-11 RES, ADJ, CARBON 10K  
 RV939 1-241-630-11 RES, ADJ, CARBON 10K  
 RV940 1-241-631-11 RES, ADJ, CARBON 22K

C1512 1-108-704-11 MYLAR 0.1MF 10% 200V  
 C1513 1-162-318-11 CERAMIC 0.001MF 10% 500V  
 C1514 1-102-951-00 CERAMIC 15PF 5% 50V  
 C1515 1-102-959-00 CERAMIC 22PF 5% 50V  
 C1516 1-102-963-00 CERAMIC 33PF 5% 50V

RV941 1-241-631-11 RES, ADJ, CARBON 22K  
 RV942 1-241-631-11 RES, ADJ, CARBON 22K  
 RV943 1-241-631-11 RES, ADJ, CARBON 22K  
 RV944 1-241-631-11 RES, ADJ, CARBON 22K  
 RV945 1-241-631-11 RES, ADJ, CARBON 22K

C1517 1-123-875-11 ELECT 10MF 20% 50V  
 C1518 1-102-074-00 CERAMIC 0.001MF 10% 50V  
 C1519 1-108-688-11 MYLAR 0.0047MF 10% 200V  
 C1520 1-126-803-11 ELECT 47MF 20% 16V  
 C1521 1-124-907-11 ELECT 10MF 20% 50V

RV946 1-241-631-11 RES, ADJ, CARBON 22K  
 RV947 1-241-631-11 RES, ADJ, CARBON 22K  
 RV948 1-241-631-11 RES, ADJ, CARBON 22K  
 RV949 1-241-631-11 RES, ADJ, CARBON 22K  
 RV950 1-241-631-11 RES, ADJ, CARBON 22K

C1551 1-124-122-11 ELECT 100MF 20% 50V  
 C1552 1-124-122-11 ELECT 100MF 20% 50V  
 C1553 1-102-824-00 CERAMIC 470PF 5% 50V  
 C1554 1-102-824-00 CERAMIC 470PF 5% 50V  
 C1555 1-130-483-00 MYLAR 0.01MF 5% 50V

RV951 1-241-631-11 RES, ADJ, CARBON 22K  
 RV952 1-241-631-11 RES, ADJ, CARBON 22K  
 RV953 1-241-631-11 RES, ADJ, CARBON 22K  
 RV954 1-241-631-11 RES, ADJ, CARBON 22K  
 RV955 1-241-631-11 RES, ADJ, CARBON 22K

C1556 1-130-483-00 MYLAR 0.01MF 5% 50V  
 C1557 1-102-824-00 CERAMIC 470PF 5% 50V  
 C1558 1-102-824-00 CERAMIC 470PF 5% 50V  
 C1559 1-102-824-00 CERAMIC 470PF 5% 50V  
 C1560 1-102-824-00 CERAMIC 470PF 5% 50V

RV956 1-241-631-11 RES, ADJ, CARBON 22K  
 RV957 1-241-631-11 RES, ADJ, CARBON 22K  
 RV958 1-241-631-11 RES, ADJ, CARBON 22K  
 RV959 1-241-631-11 RES, ADJ, CARBON 22K  
 RV960 1-241-630-11 RES, ADJ, CARBON 10K  
 RV961 1-241-631-11 RES, ADJ, CARBON 22K

<DIODE>

RV962 1-241-631-11 RES, ADJ, CARBON 22K  
 RV963 1-241-631-11 RES, ADJ, CARBON 22K  
 RV964 1-241-631-11 RES, ADJ, CARBON 22K  
 RV965 1-241-631-11 RES, ADJ, CARBON 22K

D1501 8-719-911-19 DIODE ISS119

REMARK

R1502 8-719-911-19 DIODE ISS119  
 R1503 8-719-911-19 DIODE ISS119  
 R1504 8-719-911-19 DIODE ISS119  
 R1505 8-719-911-19 DIODE ISS119  
 R1506 8-719-911-19 DIODE ISS119

R1507 8-719-982-36 DIODE MTZJ-39B  
 R1508 8-719-982-36 DIODE MTZJ-39B  
 R1509 8-719-911-19 DIODE ISS119

&lt;IC&gt;

IC1551 8-759-145-58 IC UPC4558C  
 IC1552 8-759-912-77 IC LM324N

&lt;COIL&gt;

L1502 1-408-418-00 INDUCTOR 56UH

&lt;TRANSISTOR&gt;

Q1501 8-729-208-39 TRANSISTOR 2SA1306A-Y  
 Q1502 8-729-208-72 TRANSISTOR 2SC3298B-Y  
 Q1503 8-729-119-78 TRANSISTOR 2SC2785-NFE  
 Q1504 8-729-119-78 TRANSISTOR 2SC2785-HFE  
 Q1505 8-729-119-76 TRANSISTOR 2SA1175-HFE

Q1506 8-729-119-78 TRANSISTOR 2SC2785-HFE  
 Q1507 8-729-119-78 TRANSISTOR 2SC2785-HFE  
 Q1508 8-729-142-80 TRANSISTOR 2SC3733  
 Q1509 8-729-231-60 TRANSISTOR 2SD1406-YGR  
 Q1510 8-729-141-83 TRANSISTOR 2SB1094-LK

Q1511 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1512 8-729-141-83 TRANSISTOR 2SB1094-LK  
 Q1513 8-729-231-60 TRANSISTOR 2SD1406-YGR  
 Q1514 8-729-141-83 TRANSISTOR 2SB1094-LK

Q1515 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1516 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1517 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1518 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1519 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1520 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1521 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1522 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1523 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1524 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1525 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1526 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1527 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1528 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1529 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1530 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1531 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1532 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1533 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1534 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1535 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1536 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1537 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1538 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1539 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1540 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1541 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1542 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1543 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1544 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1545 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1546 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1547 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1548 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1549 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1550 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1551 8-729-231-60 TRANSISTOR 2SD1406-YGR

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Q1555 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1556 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1557 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1558 8-729-231-60 TRANSISTOR 2SD1406-YGR

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Q1566 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1567 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1568 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1569 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1570 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1571 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1572 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1573 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1574 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1575 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1576 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1577 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1578 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1579 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1580 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1581 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1582 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1583 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1584 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1585 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1586 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1587 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1588 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1589 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1590 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1591 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1592 8-729-231-60 TRANSISTOR 2SD1406-YGR

Q1593 8-729-231-60 TRANSISTOR 2SD1406-YGR

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H1 H3 H2 J

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

J

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK			
<C>														
IC091	8-741-148-33	IC SBX1483-59		C281	1-124-442-00	ELECT 330MF 20%	6.3V	D911	8-719-921-69	DIODE MTZJ-9.1	JR940 1-216-295-00 METAL GLAZE 0 5% 1/10W			
R091	1-249-413-11	CARBON 470 5% 1/4W		C291	1-101-005-00	CERAMIC 0.022MF	50V	D912	8-719-921-69	DIODE MTZJ-9.1	JR942 1-216-295-00 METAL GLAZE 0 5% 1/8W			
<RESISTOR>														
R091	1-249-413-11	CARBON 470 5% 1/4W		C292	1-101-005-00	CERAMIC 0.022MF	50V	D913	8-719-921-69	DIODE MTZJ-9.1	JR944 1-216-295-00 METAL GLAZE 0 5% 1/10W			
*1-644-712-11	H3 BOARD *****			C295	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	D914	8-719-921-69	DIODE MTZJ-9.1	JR946 1-216-295-00 METAL GLAZE 0 5% 1/8W			
*****														
*1-644-712-11	H3 BOARD *****			C296	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	D915	8-719-921-69	DIODE MTZJ-9.1	JR947 1-216-295-00 METAL GLAZE 0 5% 1/10W			
*****														
*1-644-712-11	H3 BOARD *****			C901	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D916	8-719-921-69	DIODE MTZJ-9.1	JR952 1-216-295-00 METAL GLAZE 0 5% 1/8W			
*****														
*1-644-712-11	H3 BOARD *****			C901	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D917	8-719-921-69	DIODE MTZJ-9.1	JR954 1-216-295-00 METAL GLAZE 0 5% 1/10W			
*****														
*1-644-712-11	H3 BOARD *****			C902	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D918	8-719-921-69	DIODE MTZJ-9.1	R283 1-216-073-00 METAL GLAZE 10K 5% 1/10W			
*****														
*1-644-712-11	H3 BOARD *****			C905	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D919	8-719-921-69	DIODE MTZJ-9.1	R284 1-216-073-00 METAL GLAZE 10K 5% 1/10W			
*****														
*1-644-712-11	H3 BOARD *****			C906	1-101-004-00	CERAMIC 0.01MF	50V	D920	8-719-921-69	DIODE MTZJ-9.1	R286 1-216-097-00 METAL GLAZE 100K 5% 1/10W			
*****														
*1-644-712-11	H3 BOARD *****			C907	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D921	8-719-921-69	DIODE MTZJ-9.1	R287 1-216-216-00 METAL GLAZE 5.6K 5% 1/8W			
*****														
*1-644-712-11	H3 BOARD *****			C908	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D922	8-719-921-69	DIODE MTZJ-9.1	R288 1-216-216-00 METAL GLAZE 5.6K 5% 1/8W			
*****														
*1-644-712-11	H3 BOARD *****			C909	1-101-004-00	CERAMIC 0.01MF	50V	D923	8-719-921-69	DIODE MTZJ-9.1	R289 1-216-055-00 METAL GLAZE 1.8K 5% 1/10W			
*****														
*1-644-712-11	H3 BOARD *****			C910	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D924	8-719-921-69	DIODE MTZJ-9.1	R291 1-249-413-11 CARBON 470 5% 1/4W			
*****														
*1-644-712-11	H3 BOARD *****			C911	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	D925	8-719-921-69	DIODE MTZJ-9.1	R292 1-249-413-11 CARBON 470 5% 1/4W			
*****														
<CONNECTOR>														
CN095*1-580-690-11	PIN, CONNECTOR (PC BOARD) 2P			C912	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	<JACK>			R901 1-216-039-00 METAL GLAZE 390 5% 1/10W			
CN096*1-580-690-11	PIN, CONNECTOR (PC BOARD) 2P			C913	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D926	8-719-921-69	DIODE MTZJ-9.1	R902 1-216-039-00 METAL GLAZE 390 5% 1/10W			
<SWITCH>														
S095 A 1-692-293-11	SWITCH, PUSH (AC POWER)(1 KEY)			C914	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	D927	8-719-921-69	DIODE MTZJ-9.1	R903 1-216-113-00 METAL GLAZE 470K 5% 1/10W			
*****														
*1-644-711-11	H2 BOARD *****			C915	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	D928	8-719-921-69	DIODE MTZJ-9.1	R904 1-216-113-00 METAL GLAZE 470K 5% 1/10W			
*****														
*1-644-711-11	H2 BOARD *****			C916	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	<COIL>			R905 1-216-188-00 METAL GLAZE 390 5% 1/10W			
*****														
<CAPACITOR>														
C083	1-101-005-00	CERAMIC 0.022MF	50V	C922	1-124-477-11	ELECT 47MF	20% 16V	J291	1-536-996-21	TERMINAL BOARD, INPUT/OUTPUT	R906 1-216-039-00 METAL GLAZE 390 5% 1/10W			
C084	1-101-005-00	CERAMIC 0.022MF	50V	C923	1-164-346-11	CERAMIC CHIP 1MF	20% 16V	J901	1-695-296-11	TERMINAL BLOCK, S	R907 1-216-171-00 METAL GLAZE 75 5% 1/8W			
<CONNECTOR>														
CN0808*1-564-525-11	PLUG, CONNECTOR 10P			C924	1-124-477-11	ELECT 47MF	20% 16V	J903	1-695-549-11	SOCKET 21P	R908 1-216-171-00 METAL GLAZE 75 5% 1/8W			
CN0819*1-568-878-51	PIN, CONNECTOR 3P			C925	1-124-477-11	ELECT 47MF	20% 16V	J904	1-695-296-11	TERMINAL BLOCK, S	R909 1-216-113-00 METAL GLAZE 470K 5% 1/10W			
CN0831*1-564-519-11	PLUG, CONNECTOR 4P			C926	1-164-346-11	CERAMIC CHIP 1MF	20% 16V	J905	1-695-549-21	SOCKET 21P	R910 1-216-113-00 METAL GLAZE 470K 5% 1/10W			
<JACK>														
J081	1-565-931-11	TERMINAL BLOCK, S 3P		C932	1-164-346-11	CERAMIC CHIP 1MF	20% 16V	J292	1-402-711-11	INDUCTOR, WIDEBAND	R911 1-216-022-00 METAL GLAZE 75 5% 1/10W			
J082	1-691-293-11	JACK		C933	1-124-477-11	ELECT 47MF	20% 16V	J293	1-402-711-11	INDUCTOR, WIDEBAND	R912 1-216-063-00 METAL GLAZE 3.9K 5% 1/10W			
<COIL>														
L081	1-408-409-00	INDUCTOR 10UH		C934	1-124-477-11	ELECT 47MF	20% 16V	J294	1-402-711-11	INDUCTOR, WIDEBAND	R913 1-216-022-00 METAL GLAZE 75 5% 1/10W			
L082	1-408-409-00	INDUCTOR 10UH		C935	1-124-477-11	ELECT 47MF	20% 16V	J295	1-402-711-11	INDUCTOR, WIDEBAND	R914 1-216-222-00 METAL GLAZE 10K 5% 1/8W			
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R082	1-249-429-11	CARBON 10K 5% 1/4W		CN1209	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P		J296	1-402-711-11	INDUCTOR, WIDEBAND	R915 1-216-039-00 METAL GLAZE 390 5% 1/10W			
R083	1-249-425-11	CARBON 4.7K 5% 1/4W		CN1210	1-564-522-11	PLUG, CONNECTOR 7P		J297	1-402-711-11	INDUCTOR, WIDEBAND	R916 1-216-089-00 METAL GLAZE 47K 5% 1/10W			
R084	1-249-421-11	CARBON 2.2K 5% 1/4W		CN1233	1-564-518-11	PLUG, CONNECTOR 3P		J298	1-402-711-11	INDUCTOR, WIDEBAND	R917 1-216-063-00 METAL GLAZE 3.9K 5% 1/10W			
R085	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W		CN1240	1-564-518-11	PLUG, CONNECTOR 3P		J299	1-402-711-11	INDUCTOR, WIDEBAND	R918 1-216-113-00 METAL GLAZE 470K 5% 1/10W			
R086	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W		<DIODE>				J299	1-402-711-11	INDUCTOR, WIDEBAND	R919 1-216-113-00 METAL GLAZE 470K 5% 1/10W			
<SWITCH>														
S082	1-572-198-11	SWITCH, TACTIL		D901	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R920 1-216-295-00 METAL GLAZE 0 5% 1/10W			
S083	1-572-198-11	SWITCH, TACTIL		D902	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R921 1-216-295-00 METAL GLAZE 0 5% 1/10W			
S084	1-572-198-11	SWITCH, TACTIL		D903	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R922 1-216-295-00 METAL GLAZE 0 5% 1/10W			
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S082	1-572-198-11	SWITCH, TACTIL		D904	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R923 1-216-295-00 METAL GLAZE 0 5% 1/10W			
S083	1-572-198-11	SWITCH, TACTIL		D905	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R924 1-216-295-00 METAL GLAZE 0 5% 1/10W			
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S082	1-572-198-11	SWITCH, TACTIL		D906	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R925 1-216-295-00 METAL GLAZE 0 5% 1/10W			
S083	1-572-198-11	SWITCH, TACTIL		D907	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R926 1-216-295-00 METAL GLAZE 0 5% 1/10W			
S084	1-572-198-11	SWITCH, TACTIL		D908	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R927 1-216-295-00 METAL GLAZE 0 5% 1/10W			
*****														
*A-1388-158-A	J BOARD, COMPLETE			D909	8-719-921-69	DIODE MTZJ-9.1		J299	1-402-711-11	INDUCTOR, WIDEBAND	R928 1-216-039-00 METAL GLAZE 390 5% 1/10W			
*****														
<COIL>														
<RESISTOR>														

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R952	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C831	1-106-220-00	NYLAR	0.1MF 10% 100V	R826	1-214-962-00	METAL	820K 1X 1/4W	R827	1-214-764-00	METAL	30K 1X 1/4W
R953	1-216-188-00	METAL GLAZE	390 5% 1/8W	C832	1-124-907-11	ELECT	10MF 20% 50V	R828	1-215-455-00	METAL	27K 1X 1/4W	R829	1-215-455-00	METAL	27K 1X 1/4W
R954	1-216-039-00	METAL GLAZE	390 5% 1/10W	C833	1-126-233-11	ELECT	22MF 20% 50V	R830	1-215-928-11	METAL OXIDE	68K 5% 3W F				
R955	1-216-039-00	METAL GLAZE	390 5% 1/10W	C834	1-102-121-00	CERAMIC	0.0022MF 10% 50V	N2	*1-568-880-61	PIN, CONNECTOR 5P		R831	1-215-928-11	METAL OXIDE	68K 5% 3W F
R956	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C835	1-124-927-11	ELECT	4.7MF 20% 50V	N3	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P		R832	1-249-417-11	CARBON	1K 5% 1/4W
R957	1-216-039-00	METAL GLAZE	390 5% 1/10W	C836	1-130-475-00	NYLAR	0.0022MF 5% 50V	N4	*1-568-879-51	PIN, CONNECTOR 4P		R833	1-249-419-11	CARBON	1.5K 5% 1/4W
R958	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C837	1-136-169-00	FILM	0.22MF 5% 50V	N5	*1-568-880-51	PIN, CONNECTOR 5P		R834	1-249-419-11	CARBON	1.5K 5% 1/4W
R959	1-216-089-00	METAL GLAZE	8.2K 5% 1/10W	C838	1-130-475-00	NYLAR	0.0022MF 5% 50V	N6	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		R835	1-215-429-00	METAL	2.2K 1X 1/4W
R960	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	C839	1-102-106-00	CERAMIC	100PF 10% 50V	N7	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		R836	1-215-435-00	METAL	3.9K 1X 1/4W
R961	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	C840	1-136-807-11	FILM	0.018MF 3% 1.6KV	N10	*1-564-511-11	PLUG, CONNECTOR 8P		R837	1-249-433-11	CARBON	22K 5% 1/4W
R990	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C841	1-136-729-11	FILM	1.5MF 5% 400V	N21	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P		R838	1-249-435-11	CARBON	33K 5% 1/4W
R991	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C842	1-130-471-00	NYLAR	0.001MF 5% 50V	N30	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		R839	1-249-438-11	CARBON	56K 5% 1/4W
R992	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C843	1-136-173-00	FILM	0.47MF 5% 50V	N851	*1-506-371-00	PIN, CONNECTOR 2P		R840	1-249-434-11	CARBON	27K 5% 1/4W
R993	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C844	1-110-364-11	NYLAR	0.1MF 10% 200V	N853	*1-506-371-00	PIN, CONNECTOR 2P		R841	1-249-429-11	CARBON	10K 5% 1/4W
R994	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C850	1-136-169-00	FILM	0.22MF 5% 50V	NL801	1-519-108-99	LAMP, NEON		R842	1-249-435-11	CARBON	33K 5% 1/4W
R995	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C851	1-124-907-11	ELECT	10MF 20% 50V	N854	*1-506-329-11	ELECT		R843	1-249-432-11	CARBON	3.3K 5% 1/4W
R996	1-216-202-00	METAL GLAZE	1.5K 5% 1/8W	C852	1-124-907-11	ELECT	10MF 20% 50V	N855	1-124-514-11	ELECT		R844	1-249-433-11	CARBON	22K 5% 1/4W
R997	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C853	1-106-220-00	NYLAR	0.1MF 10% 100V	NL801	1-519-108-99	LAMP, NEON		R845	1-249-435-11	CARBON	33K 5% 1/4W
R998	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C854	1-126-329-11	ELECT	470MF 20% 50V								
R999	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C855	1-124-514-11	ELECT	100MF 20% 50V								
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*A-1390-305-A				C856	1-162-114-00	CERAMIC	0.0047MF 2KV	<TRANSISTOR>				R846	1-249-429-11	CARBON	10K 5% 1/4W
W BOARD, COMPLETE				C858	1-124-119-00	ELECT	330MF 20% 16V	R801	8-729-201-62	TRANSISTOR 2SC2555-2		R847	1-214-761-00	METAL	22K 1X 1/4W
*****				C888	1-124-464-11	ELECT	0.22MF 20% 50V	R802	8-729-119-80	TRANSISTOR 2SC2688-LK		R848	1-215-429-00	METAL	2.2K 1X 1/4W
*4-341-751-01				<DIODE>				R803	8-729-119-76	TRANSISTOR 2SA1175-HFE		R849	1-215-421-00	METAL	1K 1X 1/4W
*4-341-752-01				<DIODE>				R804	8-729-119-78	TRANSISTOR 2SC2785-HFE		R850	1-215-429-00	METAL	2.2K 1X 1/4W
*4-363-146-00				D801	8-719-928-08	DIODE ERD28-08S		R805	8-729-119-78	TRANSISTOR 2SC2785-HFE		R851	1-215-404-00	METAL	200 1X 1/4W
*4-382-854-11				D802	8-719-300-80	DIODE RU-1C		R806	8-729-119-80	TRANSISTOR 2SC2688-LK		R853	1-215-469-00	METAL	100K 1X 1/4W
4-383-023-01				D803	8-719-921-43	DIODE MTZJ-5.1B		R807	8-729-119-78	TRANSISTOR 2SC2785-HFE		R854	1-249-430-11	CARBON	12K 5% 1/4W
SPACER, MILCA				D804	8-719-911-19	DIODE ISS119		R808	8-729-119-78	TRANSISTOR 2SC2785-HFE		R855	1-249-469-00	METAL	100K 1X 1/4W
				D805	8-719-911-19	DIODE ISS119		R811	8-729-805-07	TRANSISTOR 2SD1887-CA		R856	1-249-430-11	CARBON	12K 5% 1/4W
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<CAPACITOR>				D806	8-719-921-43	DIODE MTZJ-5.1B		R857	1-249-433-11	CARBON	22K 5% 1/4W				
				D807	8-719-921-43	DIODE MTZJ-5.1B		R858	1-249-413-11	CARBON	470 5% 1/4W				
C801				D808	8-719-911-19	DIODE ISS119		R859	1-249-435-11	CARBON	33K 5% 1/4W				
C802				D809	8-719-911-19	DIODE ISS119		R860	1-249-441-11	CARBON	100K 5% 1/4W				
C803				D810	8-719-911-19	DIODE ISS119		R861	1-249-421-11	CARBON	2.2K 5% 1/4W				
C804				D811	8-719-921-43	DIODE MTZJ-5.1B		R862	1-249-434-11	CARBON	27K 5% 1/4W				
C805				D812	8-719-911-19	DIODE ISS119		R863	1-249-431-11	CARBON	15K 5% 1/4W				
C806				D813	8-719-911-19	DIODE ISS119		R864	1-249-428-11	CARBON	8.2K 5% 1/4W				
C807				D814	8-719-911-19	DIODE ISS119		R865	1-249-440-11	CARBON	82K 5% 1/4W				
C808				D815	8-719-921-43	DIODE MTZJ-13B		R866	1-249-436-11	CARBON	39K 5% 1/4W				
C809				D816	8-719-945-80	DIODE ERC06-15S		R867	1-249-437-11	CARBON	47K 5% 1/4W				
C810				D817	8-719-911-19	DIODE ISS119		R868	1-249-428-11	CARBON	8.2K 5% 1/4W				
C811				D818	8-719-911-19	DIODE ISS119		R869	1-249-429-11	CARBON	10K 5% 1/4W				
C812				D820	8-719-911-19	DIODE ISS119		R870	1-249-417-11	CARBON	1K 5% 1/4W				
C813				D821	8-719-982-07	DIODE MTZJ-3.9A		R871	1-249-440-11	CARBON	82K 5% 1/4W				
C814				D822	8-719-902-08	DIODE V30N		R876	1-215-426-00	METAL	1.6K 1X 1/4W				
C815				D823	8-719-903-09	DIODE V30N		R877	1-249-435-11	CARBON	33K 5% 1/4W				
C816				D824	8-759-982-13	IC RC7812PA		R878	1-249-441-11	CARBON	100K 5% 1/4W				
C817				D825	8-759-103-93	IC UPC393C		R879	1-216-489-11	METAL OXIDE	27K 5% 3W F				
C818				D826	8-759-990-82	IC TL082CP		R880	1-249-429-11	CARBON	10K 5% 1/4W				
C819				D827	8-759-100-75	IC UPC1394C		R881	1-214-761-00	METAL	22K 1X 1/4W				
C820				D828	8-759-103-93	IC UPC393C		R882	1-249-433-11	CARBON	10K 5% 1/4W				
C821				D829	8-759-107-93	IC UPC1394C		R883	1-249-441-11	CARBON	1K 5% 1/4W				
C822				D830	8-759-107-93	IC UPC1394C		R884	1-249-417-11	CARBON	56K 5% 1/4W				
C823				D831	8-759-107-93	IC UPC1394C		R885	1-249-438-11	CARBON	56K 5% 1/4W				
C824				D832	8-759-107-93	IC UPC1394C		R886	1-249-414-11	CARBON	560 5% 1/4W				
C825				D833	8-759-107-93	IC UPC1394C		R887	1-215-397-00	METAL	100 1% 1/4W				
C826				D834	8-759-107-93	COIL, CHOKE 90UH		R888	1-249-410-11	CARBON	270 5% 1/4W				
C827				D835	8-759-107-93	COIL, CHOKE 1.05MH		R889	1-249-417-11	CARBON	1K 5% 1/4W				
C828				D836	8-759-107-93	INDUCTOR 1.00UH									
C829				D837	8-759-107-93	COIL, CHOKE 1.05MH			</td						

Replace only with part number specified.																					
N	ZR	ZG	ZB	P																	
REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION							
R890	1-249-431-11	CARBON	15K	5%	1/4W			<RESISTOR>				C1430	1-163-038-00	CERAMIC CHIP 0.1MF	25V						
R891	1-216-489-11	METAL OXIDE	27K	5%	3W	F		C1431	1-163-031-11	CERAMIC CHIP 0.01MF	50V		IC1404	8-750-055-52	IC SD49080XCEG						
R892	1-249-417-11	CARBON	1K	5%	1/4W		R1911	1-202-822-00	SOLID	2.2K	20%	1/2W	C1432	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1405	8-759-046-27	IC SD49086-3		
R893	1-215-453-00	METAL	22K	1%	1/4W		R1912	1-202-822-00	SOLID	2.2K	20%	1/2W	C1433	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1406	8-759-504-21	IC TD4843A/C4		
R894	1-249-401-11	CARBON	47	5%	1/4W		R1913	1-249-414-11	CARBON	560	5%	1/4W	C1434	1-163-038-00	CERAMIC CHIP 0.1MF	25V	IC1410	8-759-037-45	IC MC78L08ACPRP		
R895	1-202-731-00	SOLID	10M	20%	1/2W		R1914	1-249-414-11	CARBON	560	5%	1/4W	C1435	1-163-038-00	CERAMIC CHIP 0.1MF	25V	IC1411	8-759-081-30	IC MC78L05ACPRP		
R896	1-260-111-11	CARBON	5K	1%	1/2W							C1436	1-163-038-00	CERAMIC CHIP 0.1MF	25V						
R897	1-247-881-00	CARBON	120K	5%	1/4W							C1437	1-164-343-11	CERAMIC CHIP 0.056MF	10%	25V	L1401	1-408-418-00	INDUCTOR	56UH	
R898	1-202-730-00	SOLID	8.2M	20%	1/2W							C1438	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	L1405	1-408-407-00	INDUCTOR	6.8UH	
R899	1-249-429-11	CARBON	10K	5%	1/4W		ZG2	*1-564-523-11	PLUG, CONNECTOR 8P				C1441	1-164-005-11	CERAMIC CHIP 0.47MF	25V	L1406	1-408-407-00	INDUCTOR	6.8UH	
R903	1-202-541-31	SOLID	47	5%	1/2W		ZG19	*1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P				C1442	1-164-005-11	CERAMIC CHIP 0.47MF	25V					
R904	1-215-928-11	METAL OXIDE	68K	5%	3W	F						C1443	1-163-251-11	CERAMIC CHIP 100PF	5%	50V					
R910	1-249-425-11	CARBON	4.7K	5%	1/4W							C1444	1-164-005-11	CERAMIC CHIP 0.47MF	25V						
	<VARIABLE RESISTOR>											C1445	1-164-005-11	CERAMIC CHIP 0.47MF	25V						
	<CONNECTOR>											C1446	1-164-005-11	CERAMIC CHIP 0.47MF	25V						
	<TRANSISTOR>											C1447	1-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1401	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
RV901	1-241-631-11	RES, ADJ, CARBON	22K									C1448	1-164-222-11	CERAMIC CHIP 0.22MF	25V	Q1402	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
RV902	1-241-631-11	RES, ADJ, CARBON	22K									C1449	1-163-257-11	CERAMIC CHIP 180PF	5%	50V	Q1404	8-729-216-22	TRANSISTOR 2SA1162-G		
SG801	1-519-422-11	GAP, SPARK										C1450	1-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1405	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	<SPARK GAP>											C1452	1-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1406	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	<TRANSFORMER>											C1453	1-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1407	8-729-216-22	TRANSISTOR 2SA1162-G			
	<RESISTOR>											C1454	1-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1408	8-729-216-22	TRANSISTOR 2SA1162-G			
T801	1-437-078-00	TRANSFORMER, HORIZONTAL DRIVE										C1455	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	Q1413	8-729-216-22	TRANSISTOR 2SA1162-G		
T802	1-437-090-00	HDT										C1456	1-163-133-00	CERAMIC CHIP 470PF	5%	50V					
T803	Δ 1-453-121-11	TRANSFORMER ASSY, FLYBACK (NX-263084)										C1457	1-164-005-11	CERAMIC CHIP 0.47MF	25V						
	<CONNECTOR>											C1461	1-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1414	8-729-900-53	TRANSISTOR DTC114EK			
	<TRANSISTOR>											C1462	1-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1415	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	<CONNECTOR>											C1463	1-164-004-11	CERAMIC CHIP 0.47MF	25V	Q1417	8-729-900-53	TRANSISTOR DTC114BK			
	<RESISTOR>											C1464	1-126-101-11	ELECT 100MF	20%	16V	Q1418	8-729-900-53	TRANSISTOR DTC114BK		
	<CAPACITOR>											C1465	1-126-101-11	ELECT 100MF	20%	16V	Q1419	8-729-900-53	TRANSISTOR DTC114EK		
	<CONNECTOR>											C1466	1-126-101-11	ELECT 100MF	20%	16V	Q1421	8-729-120-28	TRANSISTOR 2SC1623-L5L6		
	<TRANSISTOR>											C1467	1-126-101-11	ELECT 100MF	20%	16V	Q1422	8-729-120-28	TRANSISTOR 2SC1623-L5L6		
	<RESISTOR>											C1471	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V					
	<CONNECTOR>											C1472	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V					
	<RESISTOR>											C1473	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V					
	<CAPACITOR>											C1481	1-164-005-11	CERAMIC CHIP 0.47MF	25V	JR1401	1-216-295-00	METAL GLAZE 0	5%	1/10W	
	<CONNECTOR>											C1482	1-163-001-11	CERAMIC CHIP 220PF	10%	50V	JR1402	1-216-295-00	METAL GLAZE 0	5%	1/10W
C1901	1-162-115-00	CERAMIC	330PF	10%	2KV							C1491	1-124-907-11	ELECT 10MF	20%	50V	JR1403	1-216-295-00	METAL GLAZE 0	5%	1/10W
C1902	1-162-115-00	CERAMIC	330PF	10%	2KV											JR1404	1-216-073-00	METAL GLAZE 10K	5%	1/10W	
	<RESISTOR>															R1403	1-216-025-00	METAL GLAZE 100	5%	1/10W	
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	<TRANSISTOR>															R1405	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
	<CONNECTOR>															R1406	1-216-051-00	METAL GLAZE 1.2K	5%	1/10W	
	<RESISTOR>															R1407	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
	<CONNECTOR>															R1408	1-216-041-00	METAL GLAZE 470	5%	1/10W	
	<TRANSISTOR>															R1410	1-216-029-00	METAL GLAZE 150	5%	1/10W	
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	<TRANSISTOR>															R1417	1-216-033-00	METAL GLAZE 220	5%	1/10W	
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	<TRANSISTOR>															R1421	1-216-033-00	METAL GLAZE 220	5%	1/10W	
	<CONNECTOR>															R1422	1-216-023-00	METAL GLAZE 82	5%	1/10W	
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	<TRANSISTOR>															R1429	1-216-091-00	METAL GLAZE 56K	5%	1/10W	
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	<TRANSISTOR>															R1432	1-216-031-00	METAL GLAZE 180	5%	1/10W	
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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK							
R1433	1-216-113-00	METAL GLAZE	470K 5%	1/10W	C1106	1-163-437-91	CERAMIC CHIP 180PF	5%	50V			R1127	1-216-097-00	METAL GLAZE	100K 5%	1/10W						
R1434	1-216-023-00	METAL GLAZE	82 5%	1/10W	C1107	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V			R1128	1-216-089-00	METAL GLAZE	47K 5%	1/10W						
R1435	1-216-075-00	METAL GLAZE	12K 5%	1/10W	C1108	1-163-059-00	CERAMIC CHIP 0.01MF	50V		<FERRITE BEAD>		R1129	1-216-089-00	METAL GLAZE	47K 5%	1/10W						
R1436	1-216-045-00	METAL GLAZE	680 5%	1/10W	C1109	1-163-033-00	CERAMIC CHIP 0.022MF	50V		FBI101	1-410-396-41	FERRITE BEAD INDUCTOR		R1130	1-216-246-00	METAL GLAZE	100K 5%	1/8W				
R1437	1-216-033-00	METAL GLAZE	220 5%	1/10W	C1110	1-164-336-11	CERAMIC CHIP 0.33MF	25V		FBI102	1-410-396-41	FERRITE BEAD INDUCTOR		R1131	1-216-218-00	METAL GLAZE	6.8K 5%	1/8W				
R1438	1-216-047-00	METAL GLAZE	820 5%	1/10W	C1111	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	FBI103	1-410-396-41	FERRITE BEAD INDUCTOR		R1132	1-216-097-00	METAL GLAZE	100K 5%	1/10W				
R1439	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C1112	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	FBI104	1-410-396-41	FERRITE BEAD INDUCTOR		R1133	1-216-089-00	METAL GLAZE	47K 5%	1/10W				
R1440	1-249-413-11	CARBON	470 5%	1/4W	C1113	1-124-477-11	ELECT	47MF	20%	16V	FBI105	1-410-396-41	FERRITE BEAD INDUCTOR		R1134	1-216-212-00	METAL GLAZE	3.9K 5%	1/8W			
R1441	1-216-053-00	METAL GLAZE	1.5K 5%	1/10W	C1114	1-163-038-00	CERAMIC CHIP 0.1MF	25V		FBI107	1-410-396-41	FERRITE BEAD INDUCTOR		R1135	1-216-081-00	METAL GLAZE	22K 5%	1/10W				
R1442	1-216-033-00	METAL GLAZE	1.5K 5%	1/10W	C1115	1-124-477-11	ELECT	47MF	20%	16V				R1136	1-216-081-00	METAL GLAZE	22K 5%	1/10W				
R1443	1-216-053-00	METAL GLAZE	1.5K 5%	1/10W	C1116	1-106-228-00	MYLAR	0.22MF	10%	100V				R1137	1-216-095-00	METAL GLAZE	82K 5%	1/10W				
R1444	1-216-041-00	METAL GLAZE	470 5%	1/10W	C1117	1-163-081-00	CERAMIC CHIP 0.22MF	25V							R1138	1-216-097-00	METAL GLAZE	100K 5%	1/10W			
R1445	1-216-083-00	METAL GLAZE	27K 5%	1/10W	C1118	1-163-113-00	CERAMIC CHIP 68PF	5%	50V	IC1101	8-759-511-88	IC TDA8732		R1139	1-216-005-00	METAL GLAZE	15 5%	1/10W				
R1446	1-216-079-00	METAL GLAZE	18K 5%	1/10W	C1119	1-163-193-00	CERAMIC CHIP 330PF	5%	50V	IC1102	8-759-073-17	IC SAA7282P		R1140	1-216-061-00	METAL GLAZE	3.3K 5%	1/10W				
R1449	1-216-033-00	METAL GLAZE	220 5%	1/10W	C1120	1-163-193-00	CERAMIC CHIP 330PF	5%	50V				R1141	1-216-061-00	METAL GLAZE	3.3K 5%	1/10W					
R1450	1-216-033-00	METAL GLAZE	220 5%	1/10W	C1121	1-163-113-00	CERAMIC CHIP 68PF	5%	50V				R1142	1-216-033-00	METAL GLAZE	220 5%	1/10W					
R1451	1-216-073-00	METAL GLAZE	10K 5%	1/10W	C1122	1-163-081-00	CERAMIC CHIP 0.22MF	25V		L1101	1-408-405-00	INDUCTOR	4.7UH	R1143	1-216-049-00	METAL GLAZE	1K 5%	1/10W				
R1452	1-216-025-00	METAL GLAZE	100 5%	1/10W	C1123	1-106-228-00	MYLAR	0.22MF	10%	100V	L1102	1-408-405-00	INDUCTOR	4.7UH	R1144	1-216-049-00	METAL GLAZE	1K 5%	1/10W			
R1454	1-216-025-00	METAL GLAZE	100 5%	1/10W	C1124	1-124-477-11	ELECT	47MF	20%	16V	L1103	1-410-119-11	INDUCTOR	1MHH	R1145	1-216-001-00	METAL GLAZE	10 5%	1/10W			
R1455	1-216-081-00	METAL GLAZE	22K 5%	1/10W	C1125	1-124-477-11	ELECT	47MF	20%	16V	L1104	1-410-119-11	INDUCTOR	1MHH	R1146	1-216-049-00	METAL GLAZE	1K 5%	1/10W			
R1456	1-216-081-00	METAL GLAZE	22K 5%	1/10W	C1126	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V				R1147	1-216-045-00	METAL GLAZE	680 5%	1/10W					
R1458	1-216-041-00	METAL GLAZE	470 5%	1/10W	C1127	1-163-038-00	CERAMIC CHIP 0.1MF	25V				R1148	1-216-049-00	METAL GLAZE	1K 5%	1/10W						
R1461	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C1128	1-124-477-11	ELECT	47MF	20%	16V				R1149	1-216-001-00	METAL GLAZE	10 5%	1/10W				
R1462	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C1129	1-163-038-00	CERAMIC CHIP 0.1MF	25V				R1150	1-216-045-00	METAL GLAZE	680 5%	1/10W						
R1463	1-249-417-11	CARBON	1K 5%	1/4W	C1130	1-163-205-00	CERAMIC CHIP 0.001MF	10%	50V				R1151	1-216-049-00	METAL GLAZE	1K 5%	1/10W					
R1471	1-216-037-00	METAL GLAZE	330 5%	1/10W	C1131	1-163-059-00	CERAMIC CHIP 0.01MF	50V		Q1101	8-729-120-28	TRANSISTOR 2SC1623-L5L6										
R1481	1-216-097-00	METAL GLAZE	100K 5%	1/10W	C1132	1-163-038-00	CERAMIC CHIP 0.1MF	25V		Q1102	8-729-120-28	TRANSISTOR 2SC1623-L5L6										
R1482	1-216-081-00	METAL GLAZE	22K 5%	1/10W	C1133	1-124-907-11	ELECT	10MF	20%	50V	Q1103	8-729-120-28	TRANSISTOR 2SC1623-L5L6									
R1483	1-216-097-00	METAL GLAZE	100K 5%	1/10W	C1134	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	Q1104	8-729-120-28	TRANSISTOR 2SC1623-L5L6										
R1484	1-216-083-00	METAL GLAZE	27K 5%	1/10W	C1135	1-163-038-00	CERAMIC CHIP 0.1MF	25V		Q1105	8-729-120-28	TRANSISTOR 2SC1623-L5L6										
R1485	1-216-041-00	METAL GLAZE	470 5%	1/10W	C1136	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	Q1106	8-729-120-28	TRANSISTOR 2SC1623-L5L6										
R1486	1-216-033-00	METAL GLAZE	220 5%	1/10W	C1137	1-163-038-00	CERAMIC CHIP 0.1MF	25V		Q1108	8-729-120-28	TRANSISTOR 2SC1623-L5L6										
R1487	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C1138	1-163-105-00	CERAMIC CHIP 33PF	5%	50V				X1101	1-579-689-21	VIBRATOR, CRYSTAL							
R1492	1-216-033-00	METAL GLAZE	220 5%	1/10W	C1139	1-163-105-00	CERAMIC CHIP 33PF	5%	50V				X1102	1-579-282-21	VIBRATOR, CRYSTAL							
R1493	1-216-073-00	METAL GLAZE	10K 5%	1/10W	C1140	1-163-181-00	CERAMIC CHIP 100PF	5%	50V													
R1494	1-216-174-00	METAL GLAZE	100 5%	1/8W	C1141	1-163-205-00	CERAMIC CHIP 0.001MF	5%	50V	JR1101	1-216-296-00	METAL GLAZE	0 5%	1/8W								
R1495	1-216-053-00	METAL GLAZE	1.5K 5%	1/10W	C1142	1-163-019-00	CERAMIC CHIP 0.0068MF	50V		JR1102	1-216-296-00	METAL GLAZE	0 5%	1/8W								
R1496	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C1143	1-163-003-11	CERAMIC CHIP 330PF	10%	50V	JR1103	1-216-296-00	METAL GLAZE	0 5%	1/8W	*A-1635-001-A	M BOARD, COMPLETE						
R1497	1-216-041-00	METAL GLAZE	470 5%	1/10W	C1144	1-163-121-00	CERAMIC CHIP 150PF	5%	50V	JR1104	1-216-295-00	METAL GLAZE	0 5%	1/10W								
R1498	1-216-069-00	METAL GLAZE	6.8K 5%	1/10W	C1145	1-163-121-00	CERAMIC CHIP 150PF	5%	50V	R1101	1-216-188-00	METAL GLAZE	390 5%	1/10W								
R1499	1-216-049-00	METAL GLAZE	1K 5%	1/10W	C1146	1-163-038-00	CERAMIC CHIP 0.1MF	25V		R1102	1-216-049-00	METAL GLAZE	1K 5%	1/10W								
					C1147	1-124-477-11	ELECT	47MF	20%	16V	R1103	1-216-198-00	METAL GLAZE	1K 5%	1/8W							
					C1148	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	R1104	1-216-041-00	METAL GLAZE	470 5%	1/10W								
					C1149	1-124-477-11	ELECT	47MF	20%	16V	R1105	1-216-005-00	METAL GLAZE	15 5%	1/10W							
					C1150	1-163-038-00	CERAMIC CHIP 0.1MF	25V		R1106	1-216-036-00	METAL GLAZE	300 5%	1/10W								
X1401	1-567-505-11	OSCILLATOR, CRYSTAL			C1151	1-163-038-00	CERAMIC CHIP 0.1MF	25V		R1107	1-216-042-00	METAL GLAZE	510 5%	1/10W								
X1402	1-567-504-11	OSCILLATOR, CRYSTAL			C1152	1-124-477-11	ELECT	47MF	20%	16V	R1108	1-216-063-00	METAL GLAZE	3.9K 5%	1/10W							
					C1153	1-163-087-00	CERAMIC CHIP 4PF	0.25PF	50V	R1109	1-216-202-00	METAL GLAZE	1.5K 5%	1/8W								
					C1154	1-163-038-00	CERAMIC CHIP 0.1MF	25V		R1110	1-216-196-00	METAL GLAZE	820 5%	1/8W								
					C1155	1-124-477-11	ELECT	47MF	20%	16V	R1111	1-216-041-00	METAL GLAZE	470 5%	1/10W							
					C1156	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	R1112	1-216-051-00	METAL GLAZE	1.2K 5%	1/10W								
					C1157	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	R1113	1-216-001-00	METAL GLAZE	10 5%	1/10W								
					C1158	1-163-038-00	CERAMIC CHIP 0.1MF	25V		R1114	1-216-105-00	METAL GLAZE	220K 5%	1/10W								
										R1115	1-216-121-00	METAL GLAZE	1K 5%	1/10W								
										R1116	1-216-198-00	METAL GLAZE	1K 5%	1/8W								
										R1117	1-216-097-00	METAL GLAZE	100K 5%	1/10W								
										R1118	1-216-097-00	METAL GLAZE	100K 5%	1/10W								
										R1119	1-216-073-00	METAL GLAZE	10K 5%	1/10W								
										R1120	1-216-232-00	METAL GLAZE	27K 5%	1/8W								

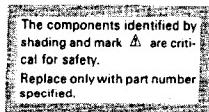
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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
C509	I-164-004-II	CERAMIC CHIP 0.0MF	10% 25V	L001	I-408-421-00	INDUCTOR	100UH	R505	I-216-075-00	METAL GLAZE	12K 5%	1/10W	C05	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V			
C510	I-124-925-11	ELECT 2.2MF	20% 50V	L501	I-410-119-11	INDUCTOR	1MMH	R506	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C06	I-124-120-11	ELECT 220MF	20% 16V			
C511	I-106-375-11	NYLAR 0.022MF	10% 250V	L561	I-408-409-00	INDUCTOR	10UH	R507	I-216-039-00	METAL GLAZE	120K 5%	1/10W	C07	I-124-903-11	ELECT 1MF	20% 50V			
C512	I-126-103-11	ELECT 470MF	20% 50V	L562	I-408-409-00	INDUCTOR	10UH	R509	I-216-039-00	METAL GLAZE	390 5%	1/10W	C08	I-163-097-00	CERAMIC CHIP 15PF	5% 50V			
C513	I-163-209-00	CERAMIC CHIP 0.0015MF	5% 50V	L563	I-408-947-00	INDUCTOR	2.2MMH	R510	I-216-073-00	METAL GLAZE	10K 5%	1/10W	C09	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V			
C514	I-163-105-00	CERAMIC CHIP 33PF	5% 50V	Q002	8-729-216-22	TRANSISTOR 2SA1162-G		R511	I-216-097-00	METAL GLAZE	100K 5%	1/10W	C10	I-163-133-00	CERAMIC CHIP 470PF	5% 50V			
C519	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q003	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R512	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C11	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V			
C522	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R513	I-216-230-00	METAL GLAZE	22K 5%	1/8W	C12	I-163-127-00	CERAMIC CHIP 270PF	5% 50V			
C523	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R514	I-216-061-00	METAL GLAZE	3.3K 5%	1/10W	C13	I-163-117-00	CERAMIC CHIP 100PF	5% 50V			
C531	I-164-493-11	CERAMIC CHIP 0.047MF	10% 50V	Q503	8-729-901-01	TRANSISTOR DTC144EK		R515	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C14	I-163-097-00	CERAMIC CHIP 15PF	5% 50V			
C532	I-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	Q508	8-729-901-01	TRANSISTOR DTC144EK		R516	I-216-039-00	METAL GLAZE	390 5%	1/10W	C15	I-163-103-00	CERAMIC CHIP 27PF	5% 50V			
C538	I-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R517	I-216-039-00	METAL GLAZE	390 5%	1/10W	C16	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V			
C541	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q505	8-729-901-01	TRANSISTOR DTC144EK		R518	I-216-075-00	METAL GLAZE	12K 5%	1/10W	C17	I-163-809-11	CERAMIC CHIP 0.047MF	10% 25V			
C542	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	Q506	8-729-901-01	TRANSISTOR DTC144EK		R519	I-216-033-00	METAL GLAZE	220 5%	1/10W	C18	I-163-093-00	CERAMIC CHIP 10PF	5% 50V			
C543	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q508	8-729-901-01	TRANSISTOR DTC144EK		R520	I-216-093-00	METAL GLAZE	68K 5%	1/10W	C19	I-163-089-00	CERAMIC CHIP 6PF	0.25PF 50V			
C544	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q564	8-729-216-22	TRANSISTOR 2SA1162-G		R521	I-216-053-00	METAL GLAZE	1.5K 5%	1/10W	C20	I-163-125-00	CERAMIC CHIP 220PF	5% 50V			
C546	I-164-004-11	CERAMIC CHIP 0.0MF	10% 25V	Q565	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R522	I-216-085-00	METAL GLAZE	33K 5%	1/10W	C21	I-163-833-00	CERAMIC CHIP 0.068MF	25V			
C547	I-163-020-00	CERAMIC CHIP 0.0082MF	10% 50V	Q566	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R523	I-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C22	I-163-117-00	CERAMIC CHIP 100PF	5% 50V			
C549	I-163-589-11	CERAMIC CHIP 0.033MF	10% 25V	Q567	8-729-901-01	TRANSISTOR DTC144EK		R524	I-216-069-00	METAL GLAZE	3.9K 5%	1/10W	C23	I-163-210-00	CERAMIC CHIP 0.0016MF	5% 50V			
C550	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	Q567	8-729-901-01	TRANSISTOR DTC144EK		R525	I-216-093-00	METAL GLAZE	68K 5%	1/10W	C24	I-164-505-11	CERAMIC CHIP 2.2MF	16V			
C552	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	Q567	8-729-901-01	TRANSISTOR DTC144EK		R526	I-216-073-00	METAL GLAZE	10K 5%	1/10W	C25	I-164-505-11	CERAMIC CHIP 2.2MF	16V			
C559	I-164-004-11	CERAMIC CHIP 0.0MF	10% 25V	Q567	8-729-901-01	TRANSISTOR DTC144EK		R527	I-216-689-11	METAL GLAZE	39K 5%	1/10W	C26	I-163-809-11	CERAMIC CHIP 0.047MF	10% 25V			
C560	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	JR002	I-216-295-00	METAL GLAZE	0 5%	1/10W	R528	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C28	I-163-137-00	CERAMIC CHIP 680PF	5% 50V		
C562	I-216-295-00	METAL GLAZE 0 5%	1/10W	JR001	I-216-025-00	METAL GLAZE	100 5%	1/10W	R529	I-216-696-11	METAL CHIP	75K 0.50%	1/10W	C30	I-163-171-00	FILM 0.33MF	5% 50V		
C563	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR002	I-216-025-00	METAL GLAZE	100 5%	1/10W	R531	I-216-085-00	METAL GLAZE	33K 5%	1/10W	C32	I-163-038-00	CERAMIC CHIP 0.1MF	25V		
C564	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR003	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R532	I-249-427-11	METAL	6.8K 5%	1/4W	C33	I-124-910-11	ELECT 47MF	20% 50V		
C565	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR006	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R533	I-216-105-00	METAL GLAZE	220K 5%	1/10W	C34	I-124-907-11	ELECT 10MF	20% 50V		
C566	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR007	I-216-073-00	METAL GLAZE	10K 5%	1/10W	R535	I-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C35	I-163-243-11	CERAMIC CHIP 47PF	5% 50V		
C567	I-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	JR008	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R536	I-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C36	I-163-223-11	CERAMIC CHIP 33PF	5% 50V		
C568	I-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	JR010	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R537	I-216-025-00	METAL GLAZE	100 5%	1/10W	C37	I-216-295-00	METAL GLAZE 0	5% 1/10W		
C569	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	JR011	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R539	I-216-657-11	METAL CHIP	1.8K 0.50%	1/10W	C39	I-163-135-00	CERAMIC CHIP 560PF	5% 50V		
C570	I-162-568-11	CERAMIC CHIP 0.33MF	10% 16V	JR012	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R540	I-216-295-00	METAL GLAZE	0 5%	1/10W	C40	I-163-263-11	CERAMIC CHIP 330PF	5% 50V		
<b>&lt;FILTER&gt;</b>																			
CD001	I-1577-364-11	VIBRATOR, CERAMIC		R014	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R541	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C40	I-163-038-00	CERAMIC CHIP 0.1MF	25V		
<b>&lt;CONNECTOR&gt;</b>																			
CN1406-1-569-880-61	PIN, CONNECTOR 5P		R015	I-216-296-00	METAL GLAZE	0 5%	1/8W	R542	I-216-025-00	METAL GLAZE	100 5%	1/10W	C53	I-163-038-00	CERAMIC CHIP 0.1MF	25V			
CN1413-1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		R016	I-216-045-00	METAL GLAZE	680 5%	1/10W	R544	I-216-085-00	METAL GLAZE	33K 5%	1/10W	C54	I-163-038-00	CERAMIC CHIP 0.1MF	25V			
R017	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R545	I-216-033-00	METAL GLAZE	220 5%	1/10W	<b>&lt;CONNECTOR&gt;</b>									
R018	I-216-041-00	METAL GLAZE	470 5%	1/10W	R546	I-216-061-00	METAL GLAZE	3.3K 5%	1/10W										
R019	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R547	I-216-049-00	METAL GLAZE	1K 5%	1/10W										
R020	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R548	I-216-097-00	METAL GLAZE	100K 5%	1/10W										
R021	I-216-065-00	METAL GLAZE	4.7K 5%	1/10W	R549	I-216-085-00	METAL GLAZE	33K 5%	1/10W										
R022	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R550	I-216-049-00	METAL GLAZE	1K 5%	1/10W										
R023	I-216-075-00	METAL GLAZE	12K 5%	1/10W	R551	I-216-049-00	METAL GLAZE	1K 5%	1/10W										
R024	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R552	I-216-097-00	METAL GLAZE	100K 5%	1/10W										
R025	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R553	I-216-085-00	METAL GLAZE	33K 5%	1/10W										
R026	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R554	I-216-049-00	METAL GLAZE	1K 5%	1/10W										
R027	I-216-075-00	METAL GLAZE	1K 5%	1/10W	R555	I-216-073-00	METAL GLAZE	10K 5%	1/10W										
R028	I-216-075-00	METAL GLAZE	12K 5%	1/10W	R556	I-216-091-00	METAL GLAZE	56K 5%	1/10W										
R029	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R557	I-216-085-00	METAL GLAZE	33K 5%	1/10W										
R030	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R558	I-216-106-00	METAL GLAZE	330K 5%	1/10W										
R031	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R559	I-216-109-00	METAL GLAZE	1K 5%	1/10W										
R032	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R560	I-216-073-00	METAL GLAZE	10K 5%	1/10W										
R033	I-216-049-00	METAL GLAZE																	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
<COIL>									
LO1	I-408-411-00	INDUCTOR	15UH	R47	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W		
LO2	I-408-414-00	INDUCTOR	27UH	R48	I-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
LO3	I-408-417-00	INDUCTOR	47UH	R49	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
LO4	I-408-413-00	INDUCTOR	22UH	R50	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
LO5	I-408-409-00	INDUCTOR	10UH	R54	1-216-073-00	METAL GLAZE	10K 5% 1/10W		
<TRANSISTOR>									
Q01	8-729-120-28	TRANSISTOR	2SC1623-L5L6	X02	1-567-495-11	OSCILLATOR, CRYSTAL			
Q03	8-729-120-28	TRANSISTOR	2SC1623-L5L6	*****					
Q04	8-729-120-28	TRANSISTOR	2SC1623-L5L6	MISCELLANEOUS					
Q06	8-729-120-28	TRANSISTOR	2SC1623-L5L6	*****					
Q07	8-729-120-28	TRANSISTOR	2SC1623-L5L6	*****					
Q08	8-729-216-22	TRANSISTOR	2SA1162-G	*****					
Q09	8-729-120-28	TRANSISTOR	2SC1623-L5L6	Δ-1-241-744-11	RESISTOR ASSY (HIGH-VOLTAGE)				
Q10	8-729-120-28	TRANSISTOR	2SC1623-L5L6	Δ-1-451-396-21	DEFLECTION YOKE (Y936PA)				
Q11	8-729-120-28	TRANSISTOR	2SC1623-L5L6	Δ-1-452-443-13	NECK ASSY, PICTURE TUBE (NA367)				
Q12	8-729-901-00	TRANSISTOR	DTC124EK	Δ-1-453-108-11	DC BLOCK, HIGH-VOLTAGE				
<RESISTOR>									
JR02	I-216-295-00	METAL GLAZE	0 5%	1-574-590-31	LEAD ASSY, HIGH-VOLTAGE				
R01	I-216-025-00	METAL GLAZE	100 5%	Δ-1-590-501-11	CORD, POWER (WITH NOISE FILTER)				
R02	I-216-025-00	METAL GLAZE	100 5%	Δ-8-736-631-05	PICTURE TUBE (SD-249 (G))				
R03	I-216-055-00	METAL GLAZE	1.8K 5%	Δ-8-736-632-05	PICTURE TUBE (SD-249 (B))				
R04	I-216-049-00	METAL GLAZE	1K 5%	Δ-8-736-633-05	PICTURE TUBE (SD-249 (R))				
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R05	I-216-041-00	METAL GLAZE	470 5%	3-755-820-11	MANUAL, INSTRUCTION				
R06	I-216-029-00	METAL GLAZE	150 5%	3-755-820-41	MANUAL, INSTRUCTION				
R07	I-216-041-00	METAL GLAZE	470 5%	*4-030-895-01	JOINT				
R08	I-216-071-00	METAL GLAZE	8.2K 5%	*4-037-938-01	INDIVIDUAL CARTON				
R09	I-216-091-00	METAL GLAZE	56K 5%	*4-037-939-01	TRAY				
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R10	I-216-057-00	METAL GLAZE	2.2K 5%	*4-037-940-01	PLATE, TOP				
R11	I-216-057-00	METAL GLAZE	2.2K 5%	*4-037-941-01	PLATE, BOTTOM				
R12	I-216-057-00	METAL GLAZE	2.2K 5%	*4-037-942-01	CUSHION (UPPER) (ASSY)				
R13	I-216-065-00	METAL GLAZE	4.7K 5%	*4-037-943-01	CUSHION (LOWER) (ASSY)				
R15	I-216-061-00	METAL GLAZE	3.3K 5%	*4-388-954-01	BAG, PROTECTION				
*****									
R16	I-216-033-00	METAL GLAZE	220 5%	REMOTE COMMANDER					
R17	I-216-033-00	METAL GLAZE	220 5%	1-466-804-11	REMOTE COMMANDER (RM-832)				
R20	I-216-049-00	METAL GLAZE	1K 5%	9-903-466-01	POCKET, COVER (FOR RM-832)				
R21	I-216-049-00	METAL GLAZE	1K 5%	*****					
R22	I-216-057-00	METAL GLAZE	2.2K 5%	*****					
*****									
R23	I-216-065-00	METAL GLAZE	4.7K 5%	R24	I-216-091-00	METAL GLAZE	56K 5% 1/10W		
R24	I-216-091-00	METAL GLAZE	56K 5%	R25	I-216-065-00	METAL GLAZE	4.7K 5% 1/10W		
R25	I-216-065-00	METAL GLAZE	4.7K 5%	R26	I-216-089-00	METAL GLAZE	47K 5% 1/10W		
R26	I-216-089-00	METAL GLAZE	47K 5%	R27	I-216-043-00	METAL GLAZE	560 5% 1/10W		
R27	I-216-043-00	METAL GLAZE	560 5%	*****					
*****									
R28	I-216-043-00	METAL GLAZE	560 5%	R29	I-216-043-00	METAL GLAZE	560 5% 1/10W		
R29	I-216-043-00	METAL GLAZE	560 5%	R30	I-216-037-00	METAL GLAZE	330 5% 1/10W		
R30	I-216-037-00	METAL GLAZE	330 5%	R31	I-216-061-00	METAL GLAZE	3.3K 5% 1/10W		
R31	I-216-061-00	METAL GLAZE	3.3K 5%	R32	I-216-073-00	METAL GLAZE	10K 5% 1/10W		
R32	I-216-073-00	METAL GLAZE	10K 5%	*****					
*****									
R33	I-216-017-00	METAL GLAZE	47 5%	R34	I-216-081-00	METAL GLAZE	22K 5% 1/10W		
R34	I-216-081-00	METAL GLAZE	22K 5%	R35	I-216-081-00	METAL GLAZE	22K 5% 1/10W		
R35	I-216-081-00	METAL GLAZE	22K 5%	R36	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W		
R36	I-216-057-00	METAL GLAZE	2.2K 5%	R37	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W		
R37	I-216-057-00	METAL GLAZE	2.2K 5%	*****					
*****									
R38	I-218-773-11	METAL CHIP	750K 0.50%	R39	I-216-103-00	METAL CHIP	180K 0.50%		
R39	I-216-103-00	METAL CHIP	180K 0.50%	R40	I-216-043-00	METAL GLAZE	560 5% 1/10W		
R40	I-216-043-00	METAL GLAZE	560 5%	R41	I-216-033-00	METAL GLAZE	220 5% 1/10W		
R41	I-216-033-00	METAL GLAZE	220 5%	R42	I-216-033-00	METAL GLAZE	220 5% 1/10W		
R42	I-216-033-00	METAL GLAZE	220 5%	*****					
*****									
R43	I-216-033-00	METAL GLAZE	220 5%	R44	I-216-033-00	METAL GLAZE	220 5% 1/10W		
R44	I-216-033-00	METAL GLAZE	220 5%	R45	I-216-073-00	METAL GLAZE	10K 5% 1/10W		
R45	I-216-073-00	METAL GLAZE	10K 5%	*****					
*****									